# ADOBE CREEK WATERSHED PLANNING STUDY
# CREEKBED SEDIMENT TESTING AND ANALYSIS
# SANTA CLARA COUNTY, CALIFORNIA
# DISTRICT PROJECT NO. 1010

## PROJECT 5499/1

**TERRATECH, INC.**

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PROPERTY OF SANTA CLARA VALLEY
WATER DISTRICT
5750 Almaden Expressway
San Jose, California 95118

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for

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DECEMBER 14, 1994

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# ADOBE CREEK WATERSHED PLANNING STUDY
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## INTRODUCTION

This report summarizes work performed and findings of an investigation conducted along Adobe Creek in Santa Clara County, California. As part of the watershed planning study being conducted by the Santa Clara Valley Water District (District), Terratech was retained to perform sediment sampling at selected locations along the Adobe Creek alignment. Additionally, sampling was performed to characterize the influence from Barron Creek, which enters Adobe Creek near the Bayshore Freeway (Highway 101). For analysis of the presence of urban pollutants for the District's nonpoint source program, samples were submitted for testing of revegetation potential, and for preliminary geotechnical classification.

Sample locations were identified on the Adobe Creek Plan & Profile sheets, located with latitude and longitude positioning coordinates, and provided in a computerized database, together with analytical results in a "pull-down" format in ATLAS GIS, by Cardinal Technologies.

## OBJECTIVE

The objective of this study was to characterize Adobe Creek sediments at targeted locations with respect to naturally occurring constituents and point and nonpoint source contaminants. Specific sampling locations were selected by the District to identify influences from various urban activities and features such as below Foothill College, and above and below the Barron Creek confluence. Additionally, sampling for agricultural suitability related to proposed bank revegetation was performed. Sixteen samples were retrieved from eleven sites, ten for contaminant analyses and six for revegetation testing.

## WORK PERFORMED

The following work was performed for this project.

1. Conducted background research, including review of geologic conditions likely to affect sediment composition, review of available recent sediment studies on other streams entering San Francisco Bay, and other readily available resources related to the project.

2. Coordinated and scheduled field work with District survey personnel, analytical laboratories, and Terratech's in-house laboratory. The District provided equipment and personnel to establish global positioning data at each sampling point. This information is summarized in our computerized database.

3. Performed sediment sampling in July 1994 at the locations shown in Figure 1. Specific sampling points were selected by the District engineer with field input by a certified engineering geologist from Terratech's staff. Toxics and revegetation soil samples were retrieved on July 14, 1994, and bulk samples for sieve analyses were retrieved on July 21, 1994.

Sample numbers, locations, approximate stations and purposes are as follows:

| SAMPLE/STATION | | DESIGNATION | PURPOSE |
|---|---|---|---|
| 1. | 132+00 | SED-1 | Characterize end result from combined Barron and Adobe Creek watersheds |
| 2. | 135+00 | SED-2 | Adobe Creek upstream of Barron Creek influence |
| 3. | 9+00 | SED-3 | On Barron Creek, without Adobe influence, in sediments |
| | 9+00 | NAT-3 | On Barron Creek in native soils |
| 4. | 254+00 | SED-4 | Upstream of El Camino Real runoff, upstream of concrete-lined channel |
| | 254+50 | REVEG-1R | Revegetation potential |
| | 252+00 | REVEG-1L | Revegetation potential |
| 5. | 368+50 | SED-5 | Upstream of Yerba Buena Avenue to show influence of Foothill Expressway runoff |
| 6. | 398+00 | REVEG-2R | Revegetation potential |
| 7. | 400+00 | SED-7 | Characterize sediments upstream of proposed channel improvements (W.Edith Avenue) |
| | 400+00 | REVEG-3R | Revegetation potential |
| 8. | 458+50 | SED-8 | Characterize Interstate 280 runoff influence (upstream of Manresa Way) |
| 9. | 505+00 | SED-9 | Characterize upstream of Interstate 280 |
| 10. | 529+00 | REVEG-4R | Revegetation potential |
| | | REVEG-4L | Revegetation potential |
| 11. | 610+00 | SED-11 | Characterize sediments upstream of urban development (upstream of Murietta Lane) |

Samples were collected in glass jars (metals analyses), brass liners (other toxics analyses), Ziploc bags (revegetation testing), and 5-gallon buckets (sieve analyses). Toxics samples were sealed, labelled and stored on ice until delivered to the laboratory. Chain-of-custody documentation was maintained during toxics sample handling and transportation.

Samples for contaminant testing comprised four discreet samples collected in a 1-meter grid pattern at each sampling station. The grid pattern was used to minimize the effects of local variations in sediment composition. These four samples were then composited in the field and packaged. Samples were collected with a trowel from a depth of 6 to 12 inches, with the exception of one sample (NAT-3) from the Barron Creek channel upstream of Highway 101 and the Adobe Creek confluence. That sample was collected in native soils at a depth of about 2 feet.

All sampling equipment was precleaned with a non-phosphate soap solution followed by a rinse with potable water, then distilled water.

4. Submitted samples to the laboratory. Ten soil samples (SED-1, SED-2, SED-3, NAT-3, SED-4, SED-5, SED-7, SED-8, SED-9, and SED-11) were submitted to Clayton, the District contract laboratory for analysis for:

    * Title 26 Metals (EPA Methods 6010, 7471 and 9073)
    * Total Petroleum Hydrocarbons as Diesel (EPA Method 8015) [selected samples rerun by gas chromatograph/mass spectrometry to identify organic substances]
    * Total Recoverable Petroleum Hydrocarbons (EPA Method 418.1)
    * Chlorinated Pesticides and PCB's (EPA Method 8080)
    * Polynuclear Aromatic Hydrocarbons (EPA Method 8100)
    * Chlorinated Herbicides (EPA Method 8150)

    Samples from these ten locations were also submitted to Terratech's in-house laboratory for analysis for:

    * Organic Content (ASTM D-2974)
    * Total Sieve Analysis: Including #200 wash (ASTM C-117,136)
    * Moisture Content (ASTM D-2216)

    The six revegetation samples (REVEG-1R, REVEG-1L, REVEG-2R, REVEG-3R, REVEG-4R, and REVEG-4L) were submitted to Soil and Plant Laboratory in Santa Clara for agriculture suitability analysis (Test AO5). This analysis included texture, major nutrient, chloride content, and cation exchange capacity.

5. Provided the data collected in an IBM personal computer (Microsoft DOS) compatible database. Data collected is indexed by latitude and longitude. In addition, appropriate computer software to access the data will be provided under separate cover.

6. Evaluated the data with respect to the study's objectives and prepared this report summarizing work performed and our findings and comments.

## PRIOR INVESTIGATIONS ON ADOBE CREEK

A Phase I Hazardous Materials Assessment was conducted along Adobe Creek from El Camino Real to Hidden Villa by Terratech in 1993. Soil sampling and analysis was conducted as part of this investigation targeting possible sources of contamination along the alignment. That analytical data has been included in the GIS package and is summarized in Table 1 and 4 with the data from the current investigation. Sample designations, approximate stations and purposes are as follows:

| SAMPLE/STATION | | DESIGNATION | PURPOSE |
|---|---|---|---|
| 1. | 310+00 | ALTM-31 | Analysis of Creek bank soils adjacent to former adjacent waste disposal site on Alta Mesa Cemetery property |
| 2. | 508+00 | FH-508 | Analysis of sediments adjacent to Foothill College Maintenance Yard |
| 3. | 613+00 | LF-613 | Analysis of sediments adjacent to domestic landfill on Hidden Valley Trust property |
| 4. | 626+00 | LF-626 | Analysis of sediments adjacent to domestic landfill on Hidden Valley Trust property |
| 5. | 634+00 | HV-634 | Analysis of Creek bank soil adjacent to drum & refuse storage area on Hidden Valley Trust property |

Results of the Phase I study did not reveal significant impact to stream sediments from the targeted sites.

## PHYSICAL SETTING

The site is located within Santa Clara Valley, a southeastward extension of San Francisco Bay within the California Coast Ranges. The Santa Clara Valley is bounded on the northeast by the Diablo Range and on the southwest by the Santa Cruz Mountains. The valley is underlain by unconsolidated alluvial fill washed into a structural depression from the bedrock of the mountainous areas. Adobe Creek is one of a number of drainages originating in the Santa Cruz Mountains to the southwest and draining northeastward into San Francisco Bay.

Adobe Creek originates at elevations of about 2,400 feet along Monte Bello Ridge in the Santa Cruz Mountains. Smaller tributaries also enter the drainage above the project alignment from a smaller ridge, El Corte Madera, to the northwest.

Adobe Creek empties into the Palo Alto Flood Basin of the Santa Clara Valley Basin, just east of the Bayshore Freeway (Highway 101). The creek bottom lies at an elevation of about 0 and is tidally influenced in this area. From this location, the alignment trends southwesterly toward El Camino Real in Palo Alto, within the flat interior portion of the basin. The stream elevation rises toward Los Altos Hills crossing into the unconfined forebay where deposits from the mountains form alluvial fans bordering the baylands. Rising into the santa Cruz Mountains to the southeast, the stream climbs into the bedrock area as defined by the District (SCVWD, 1989).

West of Foothill Expressway Santa Clara Formation bedrock is exposed above the stream channel. Just above Foothill College, outcrops of Cretaceous Franciscan Formation sandstone/graywacke is faulted against the Santa Clara Formation, along with Franciscan Formation greenstone and Tertiary Monterey Shale. Above Francemont Drive, Franciscan Formation greenstone is the predominant bedrock, with fingers of Franciscan sandstone/graywacke exposed at higher elevations (Diblee, 1966).

The Santa Clara Formation is comprised primarily of gravels derived from the Franciscan Formation within a matrix of sandstone or siltstone. The Monterey Shale is composed of gray clay shale and siltstone. The Franciscan Formation sandstone/graywacke is a hard sedimentary unit composed of quartz, plagioclase, biotite, iron oxides and other dark minerals. The Franciscan greenstone is a massive metamorphic unit composed of plagioclase, chlorite, pyroxene, sphene and iron oxides. Metals likely to be associated with the Franciscan source rock and Santa Clara Formation sedimentary rock derived from the Franciscan include chromium, iron, magnesium, manganese, nickel, and zinc. Minor amounts of lead are sometimes associated with olivene, a constituent of the basaltic rock from which greenstone originates.

## FINDINGS AND DISCUSSION

### Metals Analyses

Results of metals analytical testing, including those from the Phase I assessment, are presented in Table 1. Analytical reports and chain-of-custody documents for the recent testing are presented in Appendix A. Metals concentrations were converted from wet weight, as reported, to dry weight for comparison with results from other studies and the Puget Sound criteria (see Table 2). In general, concentrations of metals found in the Phase I assessment sampling performed along Adobe Creek fell within the range found during this investigation.

The metal concentrations along Adobe Creek showed a variety of distributions. Selenium and thallium were not detected in any of the samples. Concentrations of cadmium, mercury and molybdenum were above Clayton Laboratory's detection limits only in the sediment from the Barron Creek channel. Lead and zinc concentrations showed clear increases moving downstream, a nonpoint source pattern. However, concentrations of beryllium, cobalt, nickel and vanadium showed the opposite distribution, tending to decrease moving downstream, a natural, parent rock erosion pattern. The concentrations of the remaining six metals (antimony, arsenic, barium, chromium, copper and silver) showed no clear trend relative to location. Overall, the maximum measured metal concentrations were found near Foothill College (FH-508), potentially due to point source factors, and at the mouth of Barron Creek (SED-3 and NAT-3), probably due to nonpoint source factors. The influence of tidal flushing of the lower reaches of Barron and Adobe Creek may also impact metals concentrations in these lower reaches.

The Proposed Storm Water Management Plan (SCVWD, 1994) identified copper, lead and zinc in disc brake pads as potential contributors of these metals to storm waters entering the Bay. The findings suggest that in most brands of brake pads tested, copper was found at the highest percentages and would therefore likely be the significant metal source from the pads. Zinc was a less significant brake pad constituent (in most cases composing less than 1 percent of brake pad material), and only in two brands out of the 25 pads tested was lead found at appreciable levels. The results from the Adobe Creek analyses appear to be inconclusive with respect to the contribution from brake pad wear, as copper levels remained somewhat constant along the alignment and lead and zinc levels were variable except below the influence of Barron Creek. The Proposed Storm Water Management Plan identified the principle source of nickel in urban runoff to be erosion of upland soils; in Adobe Creek, the nickel levels decrease downstream, as would be expected under this natural scenario.

The Puget Sound Marine Sediment Quality Standards (Washington State Department of Ecology, 1991) provide chemical criteria, in dry weight, for eight metals; arsenic, cadmium, chromium, copper, lead, mercury, silver, and zinc. The Puget Sound criteria, according to the Washington State Department of Ecology, correspond to a sediment quality that results in no adverse effects to Puget Sound marine systems. Concentrations (converted to dry weight) of these metals found in Adobe Creek sediments are plotted against the Puget Sound standards in Figures 2 through 5. As shown, the Barron Creek surface samples contained mercury and zinc at levels exceeding the Puget Sound standards. No Adobe Creek samples contained metals at concentrations approaching the Puget Sound guidelines.

Table 3 provides a summary of the Puget Sound metals criteria, a range of metal concentrations found at other Bay Area locations, typical natural values and other regulatory values.

Woodward-Clyde Consultants (1992) compared six metals in Calabazas Creek sediments with other stream and Bay locations and with the Puget Sound Criteria. For the most part, their study found targeted metals - cadmium, copper, mercury, nickel, lead and zinc (Cd, Cu, Hg, Ni, Pb and Zn, respectively) - to be present in concentrations lower than the Puget Sound Criteria. Results of the Adobe Creek analyses all fell within or below the general ranges of metals concentrations found in the Woodward-Clyde study.

Results of a study of background concentrations of selected analytes from rural, suburban and urban East Bay sources: Briones Regional Park, Tilden Regional Park and Oak Glen Park and Lake Merritt (Bryden, et.al, 1991) are shown in Table 3. Adobe Creek chromium, cobalt, copper, nickel and vanadium concentrations appear to be higher by factors of 2 to 3 above those found at the rural and suburban East Bay locations, except for sediment samples from in or downstream of Barron Creek. These differentials likely reflect geologic variations in parent rock of the upstream sediments. Below Barron Creek, again it appears there has been some enrichment in metals concentrations due to urban contributions, particularly from the Barron Creek drainage. Copper, lead and zinc concentrations from in and below Barron Creek fall within the reported range for "East Bay Urban" sites.

Concentrations of all metals tested fall within typical ranges of native soil concentrations above the Barron Creek confluence (Dragun, 1988).

Results of the metals analyses also revealed metals concentrations significantly lower than the Total Threshold Limit Concentrations (TTLC) in all cases. Total copper, lead and nickel concentrations exceeded respective Soluble Threshold Limit Concentrations (STLC) in almost all locations sampled. The State of California Department of Toxic Substances Control, Preliminary Endangerment Assessment (June 22, 1990) provides exposure limits for "chronic" soil ingestion and 5-year old child criteria. The Adobe Creek concentrations of arsenic, barium, nickel and vanadium exceeded the 5-year-old child exposure limits. The Barron Creek surface sample (SED-3) exceeded the 5-year-old child limit for mercury. All metals concentrations were well above the "chronic" exposure limits.

### Pesticides

Organochlorine pesticides, specifically 4'4'-DDD, 4'4'-DDE, 4'4'-DDT and/or chlordane, were detected in downstream areas. As presented in Table 4, concentrations of less than 0.7 parts per million (ppm) combined, were found in SED-1, SED-2, SED-3, and SED-4. The highest concentration; 0.27 ppm; of combined 4'4'-DDD, 4'4'-DDE, and 4'4'-DDT was found in SED-1, well below the TTLC of 1.0 ppm for these compounds. Chlordane was found at 0.59 ppm in SED-3, well below the TTLC of 2.5 ppm. No polychlorinated biphenyl's (PCB's) or chlorinated herbicides were detected in samples tested.

### Petroleum Hydrocarbons

Total petroleum hydrocarbons (TPH) as diesel and total recoverable petroleum hydrocarbons (TRPH) were reported in nearly all samples analyzed (see Table 4). Concentrations of TRPH in and downstream of Barron Creek ranged from 580 to 1,600 ppm. TPH as diesel values in this area ranged from 69 to 610 ppm. The laboratory notes on the analytical reports indicated that TPH as diesel results did not match the typical diesel pattern, and in most locations where diesel was reported, the pattern appeared to more closely resemble oil (all extractable hydrocarbons from C10 to C42 are reported). Concentrations were at or below 100 ppm upstream of the Barron Creek confluence. A petroleum concentration of 1,000 ppm is typically used in the area as a minimum remedial threshold.

The analytical methods used to determine TPH as diesel (EPA 8015 - Modified) and TRPH (EPA Method 418.1) are non-selective and do not discriminate between petroleum and non-petroleum derived hydrocarbons. In an attempt to determine the compounds detected by the TPH analysis, Clayton Environmental Consultants re-analyzed the TPH extract from SED-1, SED-2 and SED-3 by gas chromatograph/mass spectrometry (GC/MS). Chemist Michael Lynch with Clayton reported that the compounds detected were from organics in the samples and that no petroleum fuel related compounds were present in the samples (verbal comm. December 5, 1994). The GC/MS analytical results are presented at the back of Appendix A.

Polynuclear aromatics (PNAs) were only detected in samples SED-2 and SED-3 around the Barron Creek confluence. Both concentrations were at or just above detection limits and well below the PNA's listed in the Puget Sound criteria. PNAs typically originate from burnt organic matter.

### Gradation, Moisture and Organic Content Analyses

Samples SED-1, SED-2 and SED-3 consisted of saturated organics (peat) with silt. The native material beneath SED-3 in Barron Creek (sample NAT-3) consisted of wet gray clayey sand with gravel. The remainder of the samples retrieved along Adobe Creek consisted of poorly to well graded sand with gravel and gravel with sand with little to no organics or fines. The gravel samples typically contained rounded cobbles ranging from 3 to 6 inches in diameter. Grain size distribution curves for the coarse-grained samples are provided in Appendix B.

### Revegetation Analyses

Results of the revegetation analyses from Soil and Plant Laboratory, Inc. are presented in Appendix C. Results for the six soil samples showed no particular limitations with respect to soil chemistry or anticipated soil structure. Phosphorus and/or potassium fertilization was suggested for all samples.

## CONCLUSIONS

In summary, sediment toxic and metals concentrations in stream sediments from Adobe Creek, above the Barron Creek confluence, are similar to or lower than concentrations found in the upstream reaches of the drainage and other South Bay locations, and are variable in comparison to East Bay locations, likely due to variations in source rock. The contribution of contaminants from the more urban Barron Creek watershed appears to be more significant than from the more pristine Adobe drainage. No Adobe sediment samples contained metals in excess of the Puget Sound Marine Sediment Quality Standards Chemical Criteria. Below Barron Creek, mercury and zinc concentrations approached half of the Puget Sound Criteria. The criteria was exceeded for these two metals in the sole Barron Creek sediment sample. Further, no concentrations of metals tested in the Adobe Creek drainage exceeded California hazardous waste thresholds.

The reported petroleum hydrocarbon content of downstream sediments approached, and in one case exceeded, the typical threshold of minimal remediation for the area - 1,000 ppm. However, under more detailed analyses these results appear to be due to the influence of organic materials in the samples and not petroleum contamination.

## LIMITATIONS

This report and the associated work have been provided in accordance with the general principles and practices currently employed in the environmental consulting profession. This is in lieu of all warranties, express or implied. Our sampling and testing program was necessarily limited.

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6. Terrasearch, Inc., 1992, Preliminary Environmental Assessment of Sediments on Calabazas Creek Flood Control Project, Bayshore Freeway to Holding Basin, Santa Clara, California, for Santa Clara Valley Water District, 12 p.

7. Terratech, Inc., 1993, Phase I Hazardous Materials Assessment, Upper Adobe Creek, El Camino Real to Moody Road, Santa Clara County, California, 21 p.

8. Washington State Department of Ecology, 1991, Puget Sound Sediment Management Standards, in Sediment Management Standards, Chapter 173-204 WAC, Appendix A, 61 p.

9. Woodward-Clyde Consultants, letter dated March 30, 1992 to Mr. Randall Talley, Santa Clara Valley Water District providing a comparison of Calabazas Creek sediment data to other stream sediments in Santa Clara Valley and to Puget Sound Sediment management standards, 3 p.

# TABLES

# TABLE 1 - METALS
## Summary of Analytical Test Results
## Wet Weight

Adobe Creek Watershed Planning Study
Creek Bed Sediment Testing and Analysis
Santa Clara County, California

(all concentrations in mg/kg)

| *Sample* | *SED-1* | *SED-2* | *SED-3* | *NAT-3* | *SED-4* | *ALTM-310* | *SED-5* | *SED-7* | *SED-8* | *SED-9* | *FH-508* | *SED-11* | *LF-613* | *LF-626* | *HV-634* | *Clayton DL* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Date* | 7/14/94 | 7/14/94 | 7/14/94 | 7/14/94 | 7/14/94 | 10/29/93 | 7/14/94 | 7/14/94 | 7/14/94 | 7/14/94 | 10/29/93 | 7/14/94 | 10/29/93 | 10/29/93 | 10/29/93 | |
| *Station* | 132+00 | 135+00 | 9+00(1) | 9+00(1) | 254+00 | 310+00* | 368+50 | 400+00 | 458+50 | 505+00 | 508+00* | 610+00 | 613+00* | 626+00* | 634+00* | (2) |
| Antimony | 1 | 2 | 2 | 2 | 2 | 4.2 | 2 | 2 | 3 | 2 | 4.5 | 2 | ND | ND | ND | 1 |
| Arsenic | 2 | 2 | 2 | 2 | 1 | ND | ND | 2 | ND | 1 | 3.2 | 2 | ND | 2.6 | ND | 1 |
| Barium | 73 | 76 | 72 | 170 | 81 | | 91 | 86 | 82 | 100 | | 97 | | | | 1 |
| Beryllium | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.39 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.31 | 0.39 | 0.31 | 0.1 |
| Cadmium | ND | ND | 0.8 | ND | ND | 0.29 | ND | ND | ND | ND | ND | ND | ND | ND | 0.33 | 0.5 |
| Chromium | 56 | 72 | 36 | 89 | 100 | 110 | 110 | 120 | 99 | 120 | 160 | 140 | 110 | 120 | 78 | 1 |
| Cobalt | 11 | 14 | 8 | 18 | 18 | | 20 | 18 | 19 | 23 | | 23 | | | | 1 |
| Copper | 37 | 35 | 48 | 41 | 38 | 51 | 38 | 41 | 41 | 49 | 62 | 49 | 39 | 46 | 45 | 1 |
| Lead | 41 | 32 | 75 | 5 | 7 | 15 | 5 | 7 | 6 | 8 | 7.7 | 14 | 3.8 | 8.4 | 12 | 1 |
| Mercury* | 0.1 | ND | 0.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.1 |
| Molybdenum | ND | ND | 1 | ND | ND | | ND | ND | ND | ND | | ND | | | | 1 |
| Nickel | 48 | 57 | 31 | 80 | 80 | 80 | 92 | 90 | 96 | 100 | 140 | 110 | 91 | 100 | 72 | 1 |
| Selenium | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1 |
| Silver | ND | ND | ND | 0.6 | 0.9 | ND | 0.7 | ND | 1.1 | 1 | ND | 0.8 | ND | ND | ND | 0.5 |
| Thallium | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1 |
| Vanadium | 46 | 59 | 32 | 72 | 82 | | 83 | 80 | 75 | 86 | | 100 | | | | 1 |
| Zinc | 120 | 91 | 200 | 62 | 67 | 63 | 66 | 70 | 69 | 69 | 69 | 68 | 47 | 60 | 66 | 1 |

NOTES:

**1.** On Barron Creek
**2.** Clayton Environmental Consultants' laboratory detection limit
**ND** - Not detected above laboratory's threshold of reliable quantification
***** - Analyses performed by Curtis & Tompkins, Ltd.
Blank cells represent no analysis

# TABLE 2 - METALS
## Summary of Analytical Test Results
## Dry Weight (2)

Adobe Creek Watershed Planning Study
Creek Bed Sediment Testing and Analysis
Santa Clara County, California

(all concentrations in mg/kg)

| *Sample* | *SED-1* | *SED-2* | *SED-3* | *NAT-3* | *SED-4* | *ALTM-310* | *SED-5* | *SED-7* | *SED-8* | *SED-9* | *FH-508* | *SED-11* | *LF-613* | *LF-626* | *HV-634* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Date* | 7/14/94 | 7/14/94 | 7/14/94 | 7/14/94 | 7/14/94 | 10/29/93 | 7/14/94 | 7/14/94 | 7/14/94 | 7/14/94 | 10/29/93 | 7/14/94 | 10/29/93 | 10/29/93 | 10/29/93 |
| *Station* | 132+00 | 135+00 | 9+00(1) | 9+00(1) | 254+00 | 310+00* | 368+50 | 400+00 | 458+50 | 505+00 | 508+00* | 610+00 | 613+00* | 626+00* | 634+00* |
| Antimony | 2.1 | 4.1 | 5.2 | 2.5 | 2.0 | 4.4 | 2.0 | 2.0 | 3.3 | 2.1 | 4.8 | 2.0 | ND | ND | ND |
| Arsenic | 4.2 | 4.1 | 5.2 | 2.5 | 1.0 | ND | ND | 2.0 | ND | 1.1 | 3.4 | 2.0 | ND | 2.6 | ND |
| Barium | 154.8 | 155.2 | 186.8 | 210.6 | 82.7 | | 92.5 | 87.1 | 90.6 | 106.0 | | 98.0 | | | |
| Beryllium | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.3 | 0.4 | 0.3 |
| Cadmium | ND | ND | 2.1 | ND | ND | 0.3 | ND | ND | ND | ND | ND | ND | ND | ND | 0.3 |
| Chromium | 118.8 | 147.0 | 93.4 | 110.3 | 102.1 | 115.5 | 111.9 | 121.6 | 109.4 | 127.2 | 169.6 | 141.4 | 111.7 | 121.8 | 81.9 |
| Cobalt | 23.3 | 28.6 | 20.8 | 22.3 | 18.4 | | 20.3 | 18.2 | 21.0 | 24.4 | | 23.2 | | | |
| Copper | 78.5 | 71.5 | 124.5 | 50.8 | 38.8 | 53.6 | 38.6 | 41.5 | 45.3 | 51.9 | 65.7 | 49.5 | 39.6 | 46.7 | 47.3 |
| Lead | 87.0 | 65.3 | 194.6 | 6.2 | 7.1 | 15.8 | 5.1 | 7.1 | 6.6 | 8.5 | 8.2 | 14.1 | 3.9 | 8.5 | 12.6 |
| Mercury | 0.2 | ND | 0.5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Molybdenum | ND | ND | 2.6 | ND | ND | | ND | ND | ND | ND | | ND | | | |
| Nickel | 101.8 | 116.4 | 80.4 | 99.1 | 81.7 | 84.0 | 93.6 | 91.2 | 106.1 | 106.0 | 148.4 | 111.1 | 92.4 | 101.5 | 75.6 |
| Selenium | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Silver | ND | ND | ND | 0.7 | 0.9 | ND | 0.7 | ND | 1.2 | 1.1 | ND | 0.8 | ND | ND | ND |
| Thallium | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Vanadium | 97.6 | 120.5 | 83.0 | 89.2 | 83.7 | | 84.4 | 81.0 | 82.9 | 91.2 | | 101.0 | | | |
| Zinc | 254.5 | 185.8 | 518.8 | 76.8 | 68.4 | 66.2 | 67.1 | 70.9 | 76.2 | 73.1 | 73.1 | 68.7 | 47.7 | 60.9 | 69.3 |

NOTES:

1. On Barron Creek
2. Converted to dry concentration using the formula: wet concentration * (1+ moisture content) with moisture content in decimal form.

**ND** - Not detected above laboratory's threshold of reliable quantification

* - Analyses performed by Curtis & Tompkins, Ltd.
Blank cells represent no analysis

# TABLE 3 - METALS
## Summary of Typical Metals Concentrations and Standards

Adobe Creek Watershed Planning Study
Creek Bed Sediment Testing and Analysis
Santa Clara County, California

(all concentrations in mg/kg)

| METAL | PUGET SOUND CRITERIA (1) | ADOBE CREEK RANGE (DRY WEIGHT) | CALABAZAS CREEK (2) | GUADALUPE & SOUTH BAY STATIONS (2) | ALAMEDA STATIONS (2) | EAST BAY RURAL (3) | EAST BAY SUBURBAN (3) | EAST BAY URBAN (3) | NATURALLY OCCURRING (4) | TTLC/STLC (5) | DTSC PEA (6) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ANTIMONY | | ND - 5.2 | | | | 0.3 - 1 | 0.4 - 0.8 | 0.8 - 1.4 | 0.6 - 10 | 500/15 | 500/0.9 |
| ARSENIC | 57 | ND - 5.2 | 24 - 44 | 0.1 - 1.9 | 0.99 - 13 | 1.7 - 3.9 | 1.4 - 6.0 | 1.1 - 6.3 | 1.0 - 40 | 500/5 | 1,000/2 |
| BARIUM | | 83 - 211 | | | | 51 -141 | 52 - 176 | 42 - 153 | 100 - 3500 | | 70,000/100 |
| BERYLLIUM | | 0.3 - 0.5 | | | | 0.2 | 0.3 - 0.6 | 0.1 | 0.1 - 40 | 75/0.75 | 7,000/10 |
| CADMIUM | 5.1 | ND - 2.1 | 1 | 0.12 - 1.9 | 0.076 - 0.87 | 0.06 - 0.15 | 0.09 - 0.15 | 0.16 - 3.32 | 0.01 - 7.0 | 100/1 | 1,000/2 |
| CHROMIUM | 260 | 36 - 160 | ND | 120 - 230 | 29 - 104 | 12 - 25 | 17 - 47 | 21 - 53 | 5.0 - 3000 | 2500/560 | 1E6/2,000 |
| COBALT | | 8 - 23 | 18 - 50 | | | 6.1 - 6.8 | 14 - 16 | 5.6 - 8.8 | 1.0 - 40 | | |
| COPPER | 390 | 38.6 - 124.5 | 25 - 397 | 39 - 81 | 30 - 90 | 5.2 - 12 | 23 - 29 | 24 - 215 | 2.0 - 100 | 2500/25 | |
| LEAD | 450 | 3.4 - 194.6 | 24 - 53 | 18 - 200 | 6 - 3120 | 10.8 - 14.5 | 14.5 - 20.4 | 192 - 806 | 2.0 - 200 | 1000/5 | 2,000/58 |
| MERCURY | 0.41 | ND - 0.5 | 0.02 - 0.12 | 0.09 - 0.55 | ND - 0.98 | 0.05 - 0.12 | 0.07 - 0.26 | 0.37 - 1.58 | 0.01 - 0.08 | 20/0.2 | 400/.7 |
| MOLYBDENUM | | ND - 2.6 | | | | 0.2 - 0.6 | 0.3 - 0.5 | 0.2 - 4.6 | 0.2 - 5.0 | | |
| NICKEL | | 75.6 - 198.4 | 73 - 2247 | 65 - 150 | 28 - 169 | 13 - 30 | 24 - 66 | 27 - 58 | 5.0 - 1000 | 2000/20 | 20,000/40 |
| SELENIUM | | ND | ND | 0.12 - 0.41 | ND - 0.6 | 0.3 - 1.1 | 0.4 - 0.8 | 0.3 - 1 | 0.1 - 2.0 | 100/1 | 4,000/7 |
| SILVER | 6.1 | ND - 1.2 | ND | 1.4 - 2.9 | 0.024 - 0.22 | 0.1 - 0.3 | 0.1 - 0.3 | 0.6 - 1.6 | 0.1 - 5 | 100/5 | 4,000/7 |
| THALLIUM | | ND | | | | 0.5 - 1.5 | 0.6 - 1.5 | 0.5 - 1.5 | 0.1 - 12 | 700/7 | 100/0.2(?) |
| VANADIUM | | 81 - 120.5 | | | | 10 - 14 | 23 - 39 | 15 - 36 | 20 -500 | | 9,000/10 |
| ZINC | 410 | 47.7 - 254.5 | 69 - 185 | 100 - 400 | 52 - 345 | 36 - 49 | 52 -72 | 155 - 1050 | 10 - 300 | 5000/250 | 00,000/400 |

NOTES:

1. Washington State Dept. of Ecology, 1991
2. Woodward-Clyde Consultants, 1992
3. Bryden et. al., 1991
4. Dragun, 1988
5. TTLC = Total Threshold Limit Concentration
   STLC = Soluble Threshold Limit Concentration
6. Dept. of Toxic Substances Control, Preliminary Endangerment Assessment - 6/22/90
   "chronic" soil ingestion / 5-yr child

# TABLE 4 - PCB'S, PESTICIDES, HERBICIDES & PETROLEUM HYDROCARBONS

## Summary of Analytical Test Results

Adobe Creek Watershed Planning Study
Creek Bed Sediment Testing and Analysis
Santa Clara County, California

(all concentrations in mg/kg)

**PCB'S, PESTICIDES & HERBICIDES**

| *Sample*<br>*Date*<br>*Station* | *SED-1*<br>7/14/94<br>132+00 | *SED-2*<br>7/14/94<br>135+00 | *SED-3*<br>7/14/94<br>9+00(1) | *NAT-3*<br>7/14/94<br>9+00(1) | *SED-4*<br>7/14/94<br>254+00 | *ALTM-310*<br>10/29/93<br>310+00* | *SED-5*<br>7/14/94<br>368+50 | *SED-7*<br>7/14/94<br>400+00 | *SED-8*<br>7/14/94<br>458+50 | *SED-9*<br>7/14/94<br>505+00 | *FH-508*<br>10/29/93<br>508+00* | *SED-11*<br>7/14/94<br>610+00 | *LF-613*<br>10/29/93<br>613+00* | *LF-626*<br>10/29/93<br>626+00* | *HV-634*<br>10/29/93<br>634+00* | *D.L.*<br>(2) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chlordane | ND | 0.18 | 0.59 | ND | ND | - | ND | ND | ND | ND | - | ND | - | - | - | 0.02 |
| DDD,DDE,DDT | 0.27 | 0.027 | 0.06 | ND | 0.008 | - | ND | ND | ND | ND | - | ND | - | - | - | 0.003 |
| Other 8080 Pesticdes | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ** |
| PCB's | ND | ND | ND | ND | ND | - | ND | ND | ND | ND | - | ND | - | - | - | ** |
| Chlorinated Herbicides | ND | ND | ND | ND | ND | - | ND | ND | ND | ND | - | ND | - | - | - | ** |

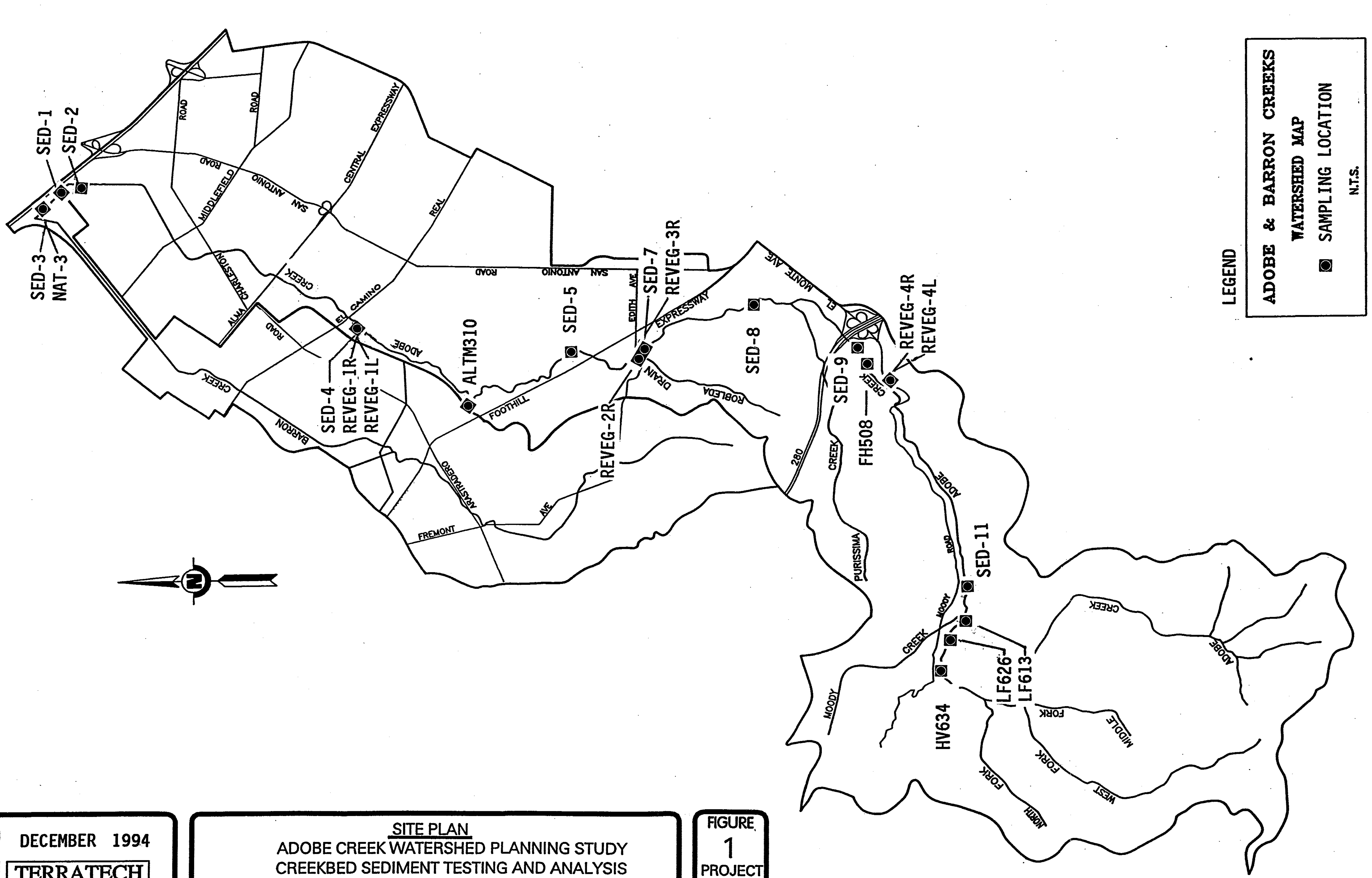
**PETROLEUM HYDROCARBONS**

|  | *SED-1* | *SED-2* | *SED-3* | *NAT-3* | *SED-4* | *ALTM-310* | *SED-5* | *SED-7* | *SED-8* | *SED-9* | *FH-508* | *SED-11* | *LF-613* | *LF-626* | *HV-634* | *D.L.* (2) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combined PNA's | ND | 6 | 17 | ND | ND | - | ND | ND | ND | ND | - | ND | - | - | - | 1 |
| TPHD | 610 | 69 | 300 | 29 | 57 | 17 | 37 | 34 | 24 | 22 | 25 | 15 | 15 | 6 | 37 | 1 |
| TRPH | 1000 | 580 | 1600 | 50 | 40 | - | 80 | 40 | ND | 100 | - | 50 | - | - | - | 30 |

NOTES:

**1.** On Barron Creek
**2.** Clayton Environmental Consultants' laboratory detection limit
**ND** : Not detected above laboratory's threshold of reliable quantification
**TPHD** : Total petroleum hydrocarbons reported as diesel
**TRPH** : Total recoverable petroleum hydrocarbons
***** : Analyses performed by Curtis & Tompkins, Ltd.
****** : See laboratory reports
**-** : Not analyzed

# FIGURES



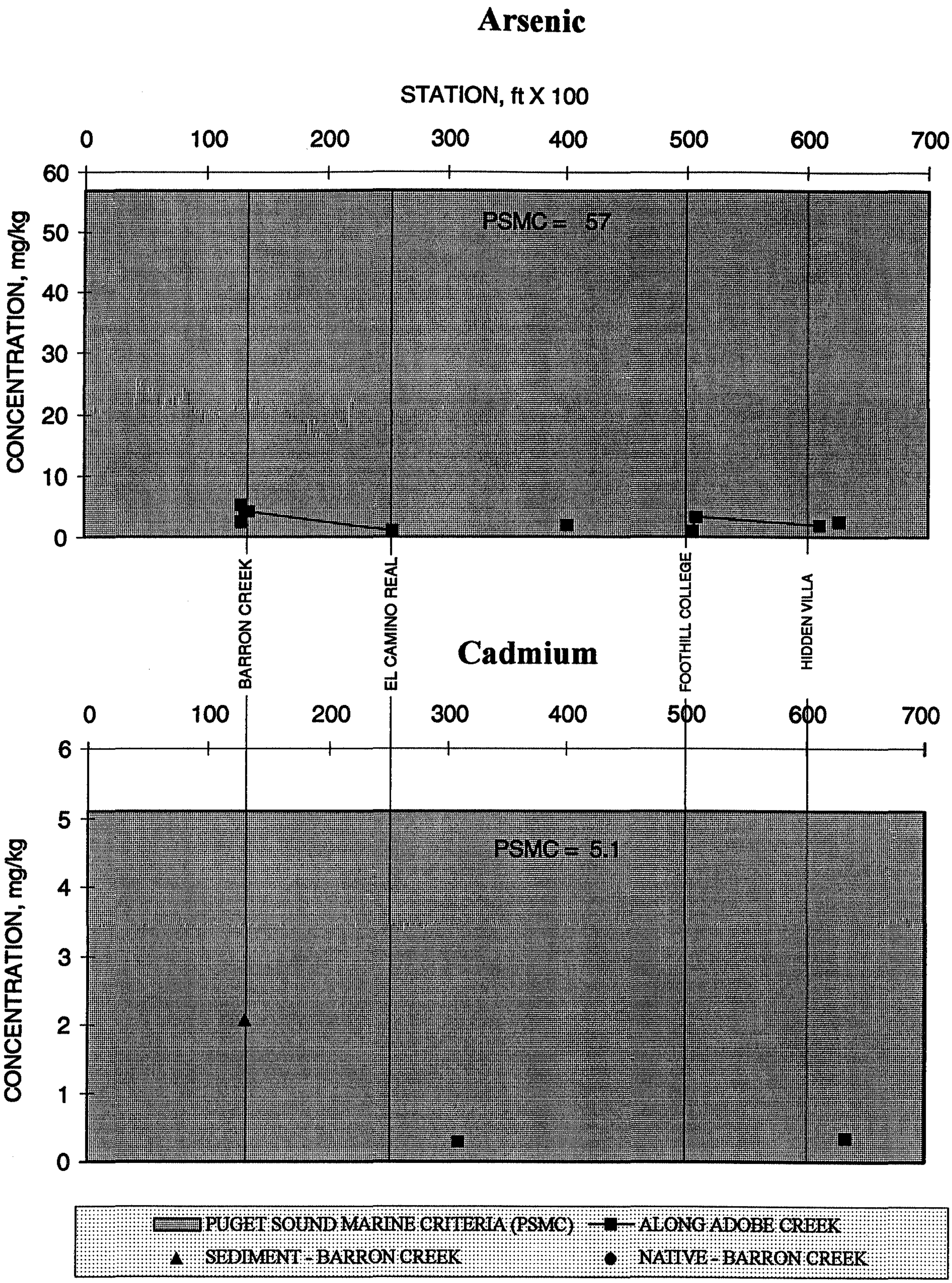
MAP SOURCE: SANTA CLARA VALLEY WATER DISTRICT

DECEMBER 1994

TERRATECH

SITE PLAN
ADOBE CREEK WATERSHED PLANNING STUDY
CREEKBED SEDIMENT TESTING AND ANALYSIS
SANTA CLARA COUNTY, CALIFORNIA

FIGURE
1
PROJECT
5499/1

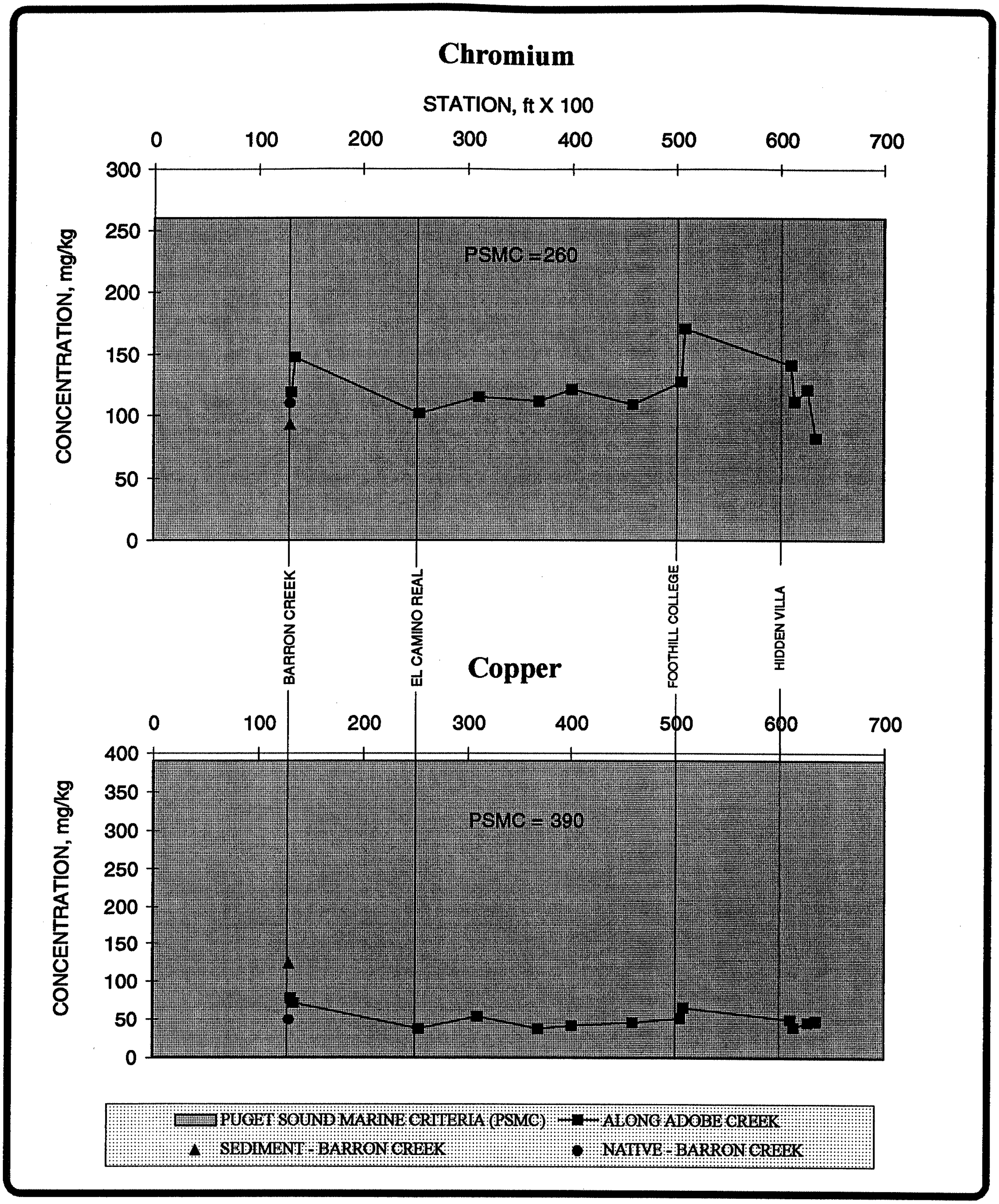


**TERRATECH, INC.**

**ARSENIC AND CADMIUM CONCENTRATIONS**

ADOBE CREEK WATERSHED PLANNING STUDY
CREEKBED SEDIMENT TESTING AND ANALYSIS
SANTA CLARA COUNTY, CALIFORNIA

FIGURE
2
PROJECT
5499/1

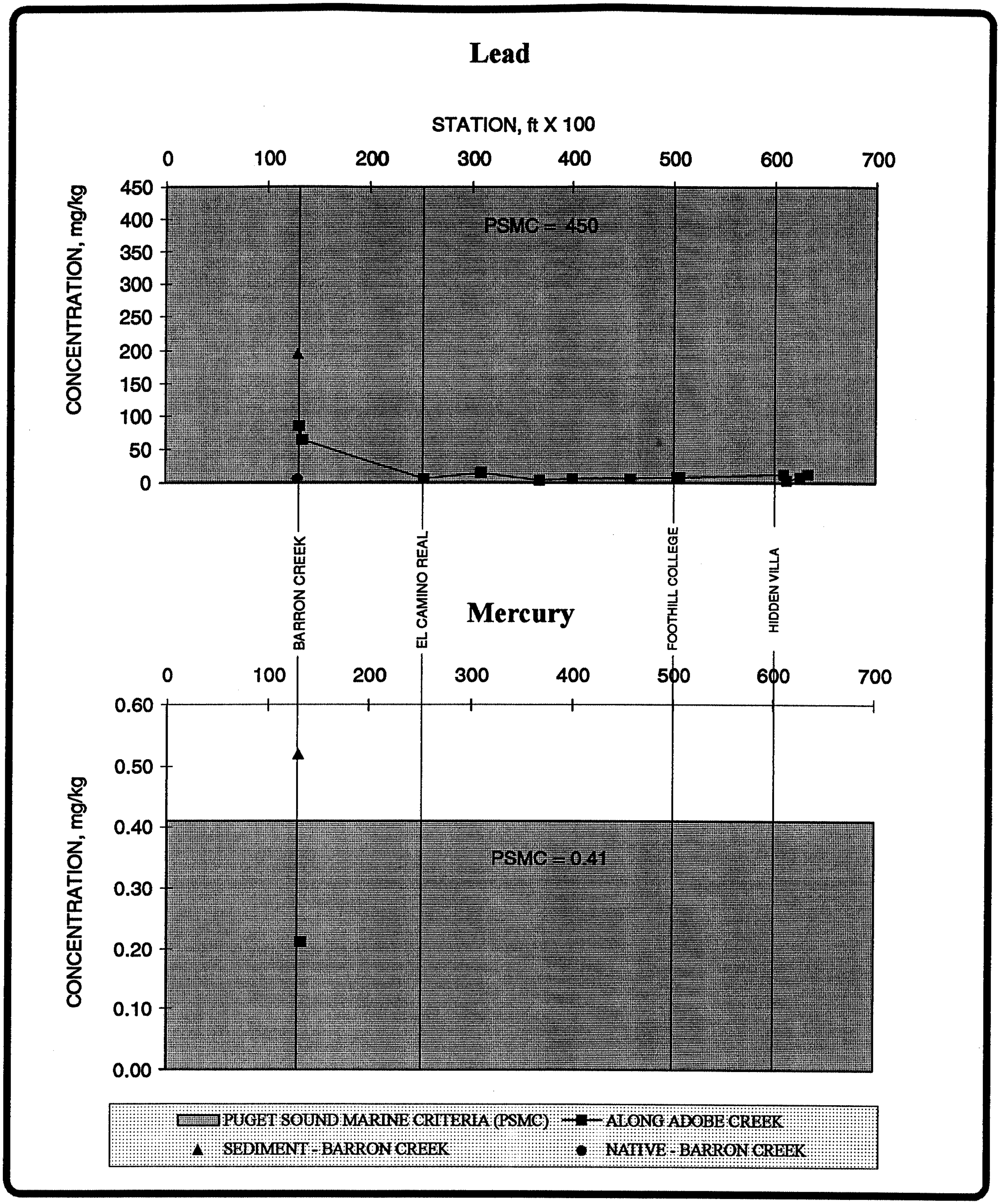


**TERRATECH, INC.**

**CHROMIUM AND COPPER CONCENTRATIONS**

ADOBE CREEK WATERSHED PLANNING STUDY
CREEKBED SEDIMENT TESTING AND ANALYSIS
SANTA CLARA COUNTY, CALIFORNIA

**FIGURE**
**3**
**PROJECT**
**5499/1**

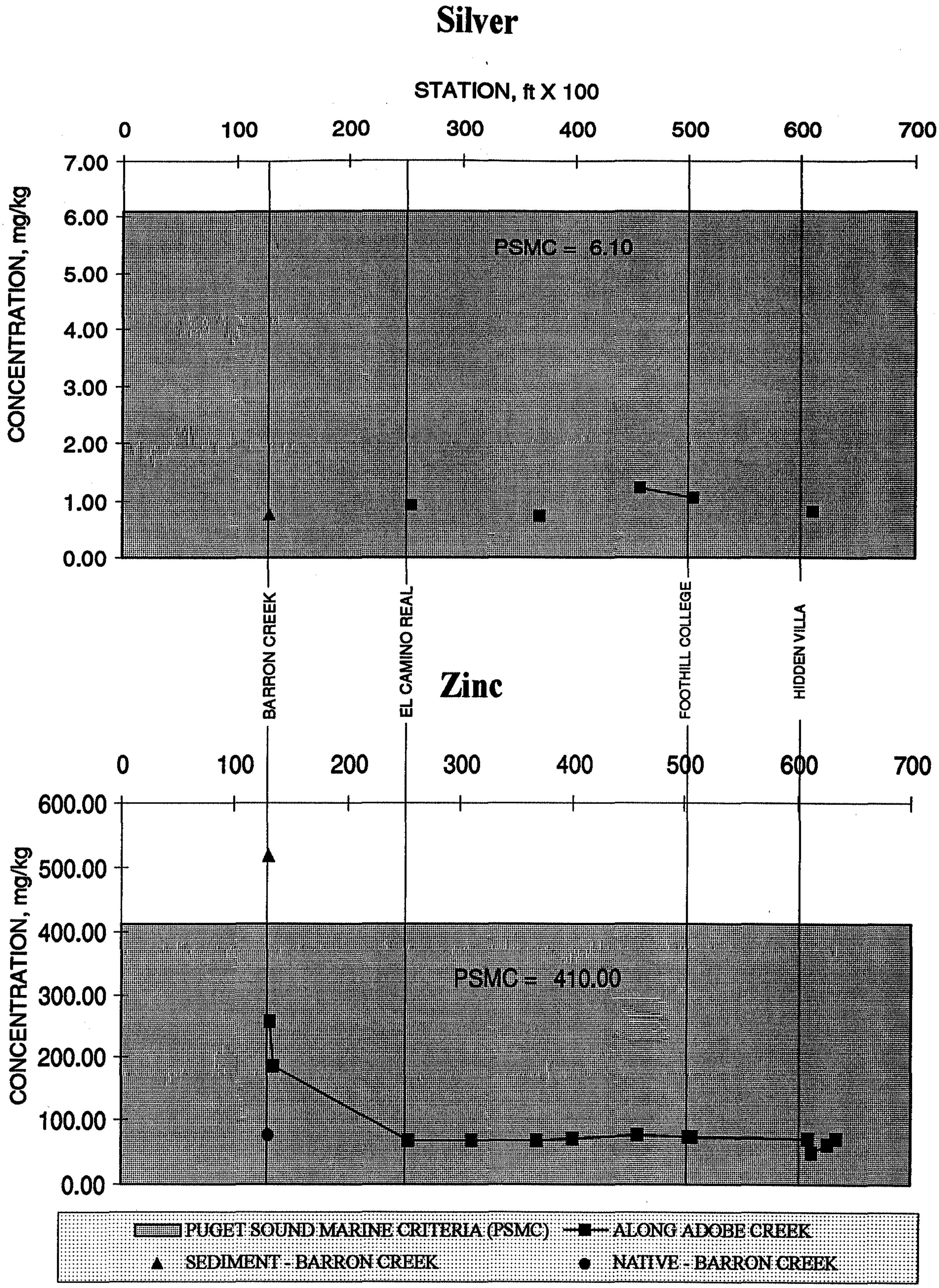


TERRATECH, INC.

**LEAD AND MERCURY CONCENTRATIONS**

ADOBE CREEK WATERSHED PLANNING STUDY
CREEKBED SEDIMENT TESTING AND ANALYSIS
SANTA CLARA COUNTY, CALIFORNIA

FIGURE
4
PROJECT
5499/1



TERRATECH, INC.

SILVER AND ZINC CONCENTRATIONS

ADOBE CREEK WATERSHED PLANNING STUDY
CREEKBED SEDIMENT TESTING AND ANALYSIS
SANTA CLARA COUNTY, CALIFORNIA

FIGURE
5
PROJECT
5499/1

# APPENDICES

# APPENDIX A

## Analytical Results and
## Chain of Custody Documentation

**Western Operations**

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

**Clayton**
ENVIRONMENTAL
CONSULTANTS

August 2, 1994

Ms. Charleen Renati
SANTA CLARA VALLEY WATER DISTRICT
5750 Almaden Expressway
San Jose, CA 95118

Client Ref.: 94-39/Adobe Creek
Clayton Project No.: 94071.88

Dear Ms. Renati:

Attached is our analytical laboratory report for the samples received on July 15, 1994. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of after September 1, 1994, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Suzanne Silvera, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
Western Operations

HAH/tjb

Attachments

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-1 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-01E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/29/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Organochlorine Pesticides | | | |
| Aldrin | 309-00-2 | ND | 0.003 |
| alpha-BHC | 319-84-6 | ND | 0.003 |
| beta-BHC | 319-85-7 | ND | 0.003 |
| Chlordane | 57-74-9 | 0.18 | 0.02 |
| 4,4'-DDD | 72-54-8 | 0.069 | 0.003 |
| 4,4'-DDE | 72-55-9 | 0.021 | 0.003 |
| 4,4'-DDT | 50-29-3 | ND | 0.003 |
| delta-BHC | 319-86-8 | ND | 0.003 |
| Dieldrin | 60-57-1 | ND | 0.003 |
| Endosulfan I | 959-98-8 | ND | 0.003 |
| Endosulfan II | 33212-65-9 | ND | 0.003 |
| Endosulfan sulfate | 1031-07-8 | ND | 0.003 |
| Endrin | 72-20-8 | ND | 0.003 |
| Endrin aldehyde | 7421-93-4 | ND | 0.003 |
| gamma-BHC (Lindane) | 58-89-9 | ND | 0.003 |
| Heptachlor | 76-44-8 | ND | 0.003 |
| Heptachlor epoxide | 1024-57-3 | ND | 0.003 |
| Methoxychlor | 72-43-5 | ND | 0.02 |
| Toxaphene | 8001-35-2 | ND | 0.2 |
| Polychlorinated Biphenyls (PCB's) | | | |
| Aroclor 1016 | 12674-11-2 | ND | 0.1 |
| Aroclor 1221 | 1104-28-2 | ND | 0.1 |
| Aroclor 1232 | 11141-16-5 | ND | 0.08 |
| Aroclor 1242 | 53469-21-9 | ND | 0.08 |
| Aroclor 1248 | 12672-29-6 | ND | 0.08 |
| Aroclor 1254 | 11097-69-1 | ND | 0.08 |
| Aroclor 1260 | 11096-82-5 | ND | 0.08 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-1 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-01E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/29/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| Decachlorobiphenyl | 2051-24-3 | 107 | 20 - 150 |
| Tetrachloro-m-xylene | 877-09-8 | 94 | 24 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-2 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-02E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/29/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Organochlorine Pesticides | | | |
| Aldrin | 309-00-2 | ND | 0.003 |
| alpha-BHC | 319-84-6 | ND | 0.003 |
| beta-BHC | 319-85-7 | ND | 0.003 |
| Chlordane | 57-74-9 | 0.18 | 0.02 |
| 4,4'-DDD | 72-54-8 | ND | 0.003 |
| 4,4'-DDE | 72-55-9 | 0.027 | 0.003 |
| 4,4'-DDT | 50-29-3 | ND | 0.003 |
| delta-BHC | 319-86-8 | ND | 0.003 |
| Dieldrin | 60-57-1 | ND | 0.003 |
| Endosulfan I | 959-98-8 | ND | 0.003 |
| Endosulfan II | 33212-65-9 | ND | 0.003 |
| Endosulfan sulfate | 1031-07-8 | ND | 0.003 |
| Endrin | 72-20-8 | ND | 0.003 |
| Endrin aldehyde | 7421-93-4 | ND | 0.003 |
| gamma-BHC (Lindane) | 58-89-9 | ND | 0.003 |
| Heptachlor | 76-44-8 | ND | 0.003 |
| Heptachlor epoxide | 1024-57-3 | ND | 0.003 |
| Methoxychlor | 72-43-5 | ND | 0.02 |
| Toxaphene | 8001-35-2 | ND | 0.2 |
| Polychlorinated Biphenyls (PCB's) | | | |
| Aroclor 1016 | 12674-11-2 | ND | 0.1 |
| Aroclor 1221 | 1104-28-2 | ND | 0.1 |
| Aroclor 1232 | 11141-16-5 | ND | 0.08 |
| Aroclor 1242 | 53469-21-9 | ND | 0.08 |
| Aroclor 1248 | 12672-29-6 | ND | 0.08 |
| Aroclor 1254 | 11097-69-1 | ND | 0.08 |
| Aroclor 1260 | 11096-82-5 | ND | 0.08 |

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-2 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-02E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/29/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| Decachlorobiphenyl | 2051-24-3 | 125 | 20 - 150 |
| Tetrachloro-m-xylene | 877-09-8 | 117 | 24 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-3 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-03E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/29/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| **Organochlorine Pesticides** | | | |
| Aldrin | 309-00-2 | ND | 0.003 |
| alpha-BHC | 319-84-6 | ND | 0.003 |
| beta-BHC | 319-85-7 | ND | 0.003 |
| Chlordane | 57-74-9 | 0.59 | 0.02 |
| 4,4'-DDD | 72-54-8 | ND | 0.003 |
| 4,4'-DDE | 72-55-9 | 0.060 | 0.003 |
| 4,4'-DDT | 50-29-3 | ND | 0.003 |
| delta-BHC | 319-86-8 | ND | 0.003 |
| Dieldrin | 60-57-1 | ND | 0.003 |
| Endosulfan I | 959-98-8 | ND | 0.003 |
| Endosulfan II | 33212-65-9 | ND | 0.003 |
| Endosulfan sulfate | 1031-07-8 | ND | 0.003 |
| Endrin | 72-20-8 | ND | 0.003 |
| Endrin aldehyde | 7421-93-4 | ND | 0.003 |
| gamma-BHC (Lindane) | 58-89-9 | ND | 0.003 |
| Heptachlor | 76-44-8 | ND | 0.003 |
| Heptachlor epoxide | 1024-57-3 | ND | 0.003 |
| Methoxychlor | 72-43-5 | ND | 0.02 |
| Toxaphene | 8001-35-2 | ND | 0.2 |
| **Polychlorinated Biphenyls (PCB's)** | | | |
| Aroclor 1016 | 12674-11-2 | ND | 0.1 |
| Aroclor 1221 | 1104-28-2 | ND | 0.1 |
| Aroclor 1232 | 11141-16-5 | ND | 0.08 |
| Aroclor 1242 | 53469-21-9 | ND | 0.08 |
| Aroclor 1248 | 12672-29-6 | ND | 0.08 |
| Aroclor 1254 | 11097-69-1 | ND | 0.08 |
| Aroclor 1260 | 11096-82-5 | ND | 0.08 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-3 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-03E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/29/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| Decachlorobiphenyl | 2051-24-3 | 109 | 20 - 150 |
| Tetrachloro-m-xylene | 877-09-8 | 113 | 24 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | NAT-3 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-04E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/28/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Organochlorine Pesticides | | | |
| Aldrin | 309-00-2 | ND | 0.003 |
| alpha-BHC | 319-84-6 | ND | 0.003 |
| beta-BHC | 319-85-7 | ND | 0.003 |
| Chlordane | 57-74-9 | ND | 0.02 |
| 4,4'-DDD | 72-54-8 | ND | 0.003 |
| 4,4'-DDE | 72-55-9 | ND | 0.003 |
| 4,4'-DDT | 50-29-3 | ND | 0.003 |
| delta-BHC | 319-86-8 | ND | 0.003 |
| Dieldrin | 60-57-1 | ND | 0.003 |
| Endosulfan I | 959-98-8 | ND | 0.003 |
| Endosulfan II | 33212-65-9 | ND | 0.003 |
| Endosulfan sulfate | 1031-07-8 | ND | 0.003 |
| Endrin | 72-20-8 | ND | 0.003 |
| Endrin aldehyde | 7421-93-4 | ND | 0.003 |
| gamma-BHC (Lindane) | 58-89-9 | ND | 0.003 |
| Heptachlor | 76-44-8 | ND | 0.003 |
| Heptachlor epoxide | 1024-57-3 | ND | 0.003 |
| Methoxychlor | 72-43-5 | ND | 0.02 |
| Toxaphene | 8001-35-2 | ND | 0.2 |
| Polychlorinated Biphenyls (PCB's) | | | |
| Aroclor 1016 | 12674-11-2 | ND | 0.1 |
| Aroclor 1221 | 1104-28-2 | ND | 0.1 |
| Aroclor 1232 | 11141-16-5 | ND | 0.08 |
| Aroclor 1242 | 53469-21-9 | ND | 0.08 |
| Aroclor 1248 | 12672-29-6 | ND | 0.08 |
| Aroclor 1254 | 11097-69-1 | ND | 0.08 |
| Aroclor 1260 | 11096-82-5 | ND | 0.08 |

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

Sample Identification: NAT-3
Lab Number: 9407188-04E
Sample Matrix/Media: SOIL
Extraction Method: EPA 3550
Method Reference: EPA 8080

Date Sampled: 07/14/94
Date Received: 07/15/94
Date Extracted: 07/27/94
Date Analyzed: 07/28/94
Analyst: TJO

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| Decachlorobiphenyl | 2051-24-3 | 117 | 20 - 150 |
| Tetrachloro-m-xylene | 877-09-8 | 115 | 24 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-4 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-05E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/28/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| **Organochlorine Pesticides** | | | |
| Aldrin | 309-00-2 | ND | 0.003 |
| alpha-BHC | 319-84-6 | ND | 0.003 |
| beta-BHC | 319-85-7 | ND | 0.003 |
| Chlordane | 57-74-9 | ND | 0.02 |
| 4,4'-DDD | 72-54-8 | ND | 0.003 |
| 4,4'-DDE | 72-55-9 | 0.008 | 0.003 |
| 4,4'-DDT | 50-29-3 | ND | 0.003 |
| delta-BHC | 319-86-8 | ND | 0.003 |
| Dieldrin | 60-57-1 | ND | 0.003 |
| Endosulfan I | 959-98-8 | ND | 0.003 |
| Endosulfan II | 33212-65-9 | ND | 0.003 |
| Endosulfan sulfate | 1031-07-8 | ND | 0.003 |
| Endrin | 72-20-8 | ND | 0.003 |
| Endrin aldehyde | 7421-93-4 | ND | 0.003 |
| gamma-BHC (Lindane) | 58-89-9 | ND | 0.003 |
| Heptachlor | 76-44-8 | ND | 0.003 |
| Heptachlor epoxide | 1024-57-3 | ND | 0.003 |
| Methoxychlor | 72-43-5 | ND | 0.02 |
| Toxaphene | 8001-35-2 | ND | 0.2 |
| **Polychlorinated Biphenyls (PCB's)** | | | |
| Aroclor 1016 | 12674-11-2 | ND | 0.1 |
| Aroclor 1221 | 1104-28-2 | ND | 0.1 |
| Aroclor 1232 | 11141-16-5 | ND | 0.08 |
| Aroclor 1242 | 53469-21-9 | ND | 0.08 |
| Aroclor 1248 | 12672-29-6 | ND | 0.08 |
| Aroclor 1254 | 11097-69-1 | ND | 0.08 |
| Aroclor 1260 | 11096-82-5 | ND | 0.08 |

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-4 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-05E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/28/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| Decachlorobiphenyl | 2051-24-3 | 115 | 20 - 150 |
| Tetrachloro-m-xylene | 877-09-8 | 106 | 24 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-5 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-06E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/29/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Organochlorine Pesticides | | | |
| Aldrin | 309-00-2 | ND | 0.003 |
| alpha-BHC | 319-84-6 | ND | 0.003 |
| beta-BHC | 319-85-7 | ND | 0.003 |
| Chlordane | 57-74-9 | ND | 0.02 |
| 4,4'-DDD | 72-54-8 | ND | 0.003 |
| 4,4'-DDE | 72-55-9 | ND | 0.003 |
| 4,4'-DDT | 50-29-3 | ND | 0.003 |
| delta-BHC | 319-86-8 | ND | 0.003 |
| Dieldrin | 60-57-1 | ND | 0.003 |
| Endosulfan I | 959-98-8 | ND | 0.003 |
| Endosulfan II | 33212-65-9 | ND | 0.003 |
| Endosulfan sulfate | 1031-07-8 | ND | 0.003 |
| Endrin | 72-20-8 | ND | 0.003 |
| Endrin aldehyde | 7421-93-4 | ND | 0.003 |
| gamma-BHC (Lindane) | 58-89-9 | ND | 0.003 |
| Heptachlor | 76-44-8 | ND | 0.003 |
| Heptachlor epoxide | 1024-57-3 | ND | 0.003 |
| Methoxychlor | 72-43-5 | ND | 0.02 |
| Toxaphene | 8001-35-2 | ND | 0.2 |
| Polychlorinated Biphenyls (PCB's) | | | |
| Aroclor 1016 | 12674-11-2 | ND | 0.1 |
| Aroclor 1221 | 1104-28-2 | ND | 0.1 |
| Aroclor 1232 | 11141-16-5 | ND | 0.08 |
| Aroclor 1242 | 53469-21-9 | ND | 0.08 |
| Aroclor 1248 | 12672-29-6 | ND | 0.08 |
| Aroclor 1254 | 11097-69-1 | ND | 0.08 |
| Aroclor 1260 | 11096-82-5 | ND | 0.08 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-5 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-06E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/29/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| Decachlorobiphenyl | 2051-24-3 | 120 | 20 - 150 |
| Tetrachloro-m-xylene | 877-09-8 | 119 | 24 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-7 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-08E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/29/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Organochlorine Pesticides | | | |
| Aldrin | 309-00-2 | ND | 0.003 |
| alpha-BHC | 319-84-6 | ND | 0.003 |
| beta-BHC | 319-85-7 | ND | 0.003 |
| Chlordane | 57-74-9 | ND | 0.02 |
| 4,4'-DDD | 72-54-8 | ND | 0.003 |
| 4,4'-DDE | 72-55-9 | ND | 0.003 |
| 4,4'-DDT | 50-29-3 | ND | 0.003 |
| delta-BHC | 319-86-8 | ND | 0.003 |
| Dieldrin | 60-57-1 | ND | 0.003 |
| Endosulfan I | 959-98-8 | ND | 0.003 |
| Endosulfan II | 33212-65-9 | ND | 0.003 |
| Endosulfan sulfate | 1031-07-8 | ND | 0.003 |
| Endrin | 72-20-8 | ND | 0.003 |
| Endrin aldehyde | 7421-93-4 | ND | 0.003 |
| gamma-BHC (Lindane) | 58-89-9 | ND | 0.003 |
| Heptachlor | 76-44-8 | ND | 0.003 |
| Heptachlor epoxide | 1024-57-3 | ND | 0.003 |
| Methoxychlor | 72-43-5 | ND | 0.02 |
| Toxaphene | 8001-35-2 | ND | 0.2 |
| Polychlorinated Biphenyls (PCB's) | | | |
| Aroclor 1016 | 12674-11-2 | ND | 0.1 |
| Aroclor 1221 | 1104-28-2 | ND | 0.1 |
| Aroclor 1232 | 11141-16-5 | ND | 0.08 |
| Aroclor 1242 | 53469-21-9 | ND | 0.08 |
| Aroclor 1248 | 12672-29-6 | ND | 0.08 |
| Aroclor 1254 | 11097-69-1 | ND | 0.08 |
| Aroclor 1260 | 11096-82-5 | ND | 0.08 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-7 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-08E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/29/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| Decachlorobiphenyl | 2051-24-3 | 120 | 20 - 150 |
| Tetrachloro-m-xylene | 877-09-8 | 111 | 24 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | METHOD BLANK | Date Sampled: | -- |
| Lab Number: | 9407188-09A | Date Received: | -- |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/28/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Organochlorine Pesticides | | | |
| Aldrin | 309-00-2 | ND | 0.003 |
| alpha-BHC | 319-84-6 | ND | 0.003 |
| beta-BHC | 319-85-7 | ND | 0.003 |
| Chlordane | 57-74-9 | ND | 0.02 |
| 4,4'-DDD | 72-54-8 | ND | 0.003 |
| 4,4'-DDE | 72-55-9 | ND | 0.003 |
| 4,4'-DDT | 50-29-3 | ND | 0.003 |
| delta-BHC | 319-86-8 | ND | 0.003 |
| Dieldrin | 60-57-1 | ND | 0.003 |
| Endosulfan I | 959-98-8 | ND | 0.003 |
| Endosulfan II | 33212-65-9 | ND | 0.003 |
| Endosulfan sulfate | 1031-07-8 | ND | 0.003 |
| Endrin | 72-20-8 | ND | 0.003 |
| Endrin aldehyde | 7421-93-4 | ND | 0.003 |
| gamma-BHC (Lindane) | 58-89-9 | ND | 0.003 |
| Heptachlor | 76-44-8 | ND | 0.003 |
| Heptachlor epoxide | 1024-57-3 | ND | 0.003 |
| Methoxychlor | 72-43-5 | ND | 0.02 |
| Toxaphene | 8001-35-2 | ND | 0.2 |
| Polychlorinated Biphenyls (PCB's) | | | |
| Aroclor 1016 | 12674-11-2 | ND | 0.1 |
| Aroclor 1221 | 1104-28-2 | ND | 0.1 |
| Aroclor 1232 | 11141-16-5 | ND | 0.08 |
| Aroclor 1242 | 53469-21-9 | ND | 0.08 |
| Aroclor 1248 | 12672-29-6 | ND | 0.08 |
| Aroclor 1254 | 11097-69-1 | ND | 0.08 |
| Aroclor 1260 | 11096-82-5 | ND | 0.08 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | METHOD BLANK | Date Sampled: | -- |
| Lab Number: | 9407188-09A | Date Received: | -- |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/28/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| Decachlorobiphenyl | 2051-24-3 | 111 | 20 - 150 |
| Tetrachloro-m-xylene | 877-09-8 | 115 | 24 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

Sample Identification: SED-1
Lab Number: 9407188-01E
Sample Matrix/Media: SOIL
Extraction Method: EPA 8150
Method Reference: EPA 8150

Date Sampled: 07/14/94
Date Received: 07/15/94
Date Extracted: 07/21/94
Date Analyzed: 07/26/94
Analyst: DTT

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Chlorinated Herbicides | | | |
| Dalapon | 75-99-0 | ND | 1 |
| Dicamba | 1918-00-9 | ND | 0.04 |
| 2,4-Dichlorophenoxyacetic acid | 94-75-7 | ND | 0.2 |
| 4-[2,4-Dichlorophenoxyl] butyric acid | 94-82-6 | ND | 0.2 |
| Dichloroprop | 120-36-5 | ND | 0.1 |
| Dinoseb | 88-85-7 | ND | 0.01 |
| MCPA | 94-74-6 | ND | 20 |
| MCPP | 7085-19-0 | ND | 20 |
| (2,4,5-Trichlorophenoxy) acetic acid | 93-76-5 | ND | 0.04 |
| 2-[2,4,5-Trichlorophenoxy] propionic acid | 93-72-1 | ND | 0.02 |
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2,4-Dichlorophenylacetic acid | 19719-28-9 | 97 | 50 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-2 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-02E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/21/94 |
| Extraction Method: | EPA 8150 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8150 | Analyst: | DTT |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Chlorinated Herbicides | | | |
| Dalapon | 75-99-0 | ND | 1 |
| Dicamba | 1918-00-9 | ND | 0.04 |
| 2,4-Dichlorophenoxyacetic acid | 94-75-7 | ND | 0.2 |
| 4-[2,4-Dichlorophenoxyl] butyric acid | 94-82-6 | ND | 0.2 |
| Dichloroprop | 120-36-5 | ND | 0.1 |
| Dinoseb | 88-85-7 | ND | 0.01 |
| MCPA | 94-74-6 | ND | 20 |
| MCPP | 7085-19-0 | ND | 20 |
| (2,4,5-Trichlorophenoxy) acetic acid | 93-76-5 | ND | 0.04 |
| 2-[2,4,5-Trichlorophenoxy] propionic acid | 93-72-1 | ND | 0.02 |
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2,4-Dichlorophenylacetic acid | 19719-28-9 | 95 | 50 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-3 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-03E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/21/94 |
| Extraction Method: | EPA 8150 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8150 | Analyst: | DTT |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Chlorinated Herbicides | | | |
| Dalapon | 75-99-0 | ND | 1 |
| Dicamba | 1918-00-9 | ND | 0.04 |
| 2,4-Dichlorophenoxyacetic acid | 94-75-7 | ND | 0.2 |
| 4-[2,4-Dichlorophenoxyl] butyric acid | 94-82-6 | ND | 0.2 |
| Dichloroprop | 120-36-5 | ND | 0.1 |
| Dinoseb | 88-85-7 | ND | 0.01 |
| MCPA | 94-74-6 | ND | 20 |
| MCPP | 7085-19-0 | ND | 20 |
| (2,4,5-Trichlorophenoxy) acetic acid | 93-76-5 | ND | 0.04 |
| 2-[2,4,5-Trichlorophenoxy] propionic acid | 93-72-1 | ND | 0.02 |
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2,4-Dichlorophenylacetic acid | 19719-28-9 | 79 | 50 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | NAT-3 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-04E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/21/94 |
| Extraction Method: | EPA 8150 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8150 | Analyst: | DTT |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Chlorinated Herbicides | | | |
| Dalapon | 75-99-0 | ND | 1 |
| Dicamba | 1918-00-9 | ND | 0.04 |
| 2,4-Dichlorophenoxyacetic acid | 94-75-7 | ND | 0.2 |
| 4-[2,4-Dichlorophenoxyl] butyric acid | 94-82-6 | ND | 0.2 |
| Dichloroprop | 120-36-5 | ND | 0.1 |
| Dinoseb | 88-85-7 | ND | 0.01 |
| MCPA | 94-74-6 | ND | 20 |
| MCPP | 7085-19-0 | ND | 20 |
| (2,4,5-Trichlorophenoxy) acetic acid | 93-76-5 | ND | 0.04 |
| 2-[2,4,5-Trichlorophenoxy] propionic acid | 93-72-1 | ND | 0.02 |
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2,4-Dichlorophenylacetic acid | 19719-28-9 | 115 | 50 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-4 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-05E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/21/94 |
| Extraction Method: | EPA 8150 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8150 | Analyst: | DTT |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Chlorinated Herbicides | | | |
| Dalapon | 75-99-0 | ND | 1 |
| Dicamba | 1918-00-9 | ND | 0.04 |
| 2,4-Dichlorophenoxyacetic acid | 94-75-7 | ND | 0.2 |
| 4-[2,4-Dichlorophenoxyl] butyric acid | 94-82-6 | ND | 0.2 |
| Dichloroprop | 120-36-5 | ND | 0.1 |
| Dinoseb | 88-85-7 | ND | 0.01 |
| MCPA | 94-74-6 | ND | 20 |
| MCPP | 7085-19-0 | ND | 20 |
| (2,4,5-Trichlorophenoxy) acetic acid | 93-76-5 | ND | 0.04 |
| 2-[2,4,5-Trichlorophenoxy] propionic acid | 93-72-1 | ND | 0.02 |
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2,4-Dichlorophenylacetic acid | 19719-28-9 | 118 | 50 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-5 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-06E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/21/94 |
| Extraction Method: | EPA 8150 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8150 | Analyst: | DTT |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Chlorinated Herbicides | | | |
| Dalapon | 75-99-0 | ND | 1 |
| Dicamba | 1918-00-9 | ND | 0.04 |
| 2,4-Dichlorophenoxyacetic acid | 94-75-7 | ND | 0.2 |
| 4-[2,4-Dichlorophenoxyl] butyric acid | 94-82-6 | ND | 0.2 |
| Dichloroprop | 120-36-5 | ND | 0.1 |
| Dinoseb | 88-85-7 | ND | 0.01 |
| MCPA | 94-74-6 | ND | 20 |
| MCPP | 7085-19-0 | ND | 20 |
| (2,4,5-Trichlorophenoxy) acetic acid | 93-76-5 | ND | 0.04 |
| 2-[2,4,5-Trichlorophenoxy] propionic acid | 93-72-1 | ND | 0.02 |
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2,4-Dichlorophenylacetic acid | 19719-28-9 | 125 | 50 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

Sample Identification: SED-7
Lab Number: 9407188-08E
Sample Matrix/Media: SOIL
Extraction Method: EPA 8150
Method Reference: EPA 8150

Date Sampled: 07/14/94
Date Received: 07/15/94
Date Extracted: 07/21/94
Date Analyzed: 07/26/94
Analyst: DTT

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Chlorinated Herbicides | | | |
| Dalapon | 75-99-0 | ND | 1 |
| Dicamba | 1918-00-9 | ND | 0.04 |
| 2,4-Dichlorophenoxyacetic acid | 94-75-7 | ND | 0.2 |
| 4-[2,4-Dichlorophenoxyl] butyric acid | 94-82-6 | ND | 0.2 |
| Dichloroprop | 120-36-5 | ND | 0.1 |
| Dinoseb | 88-85-7 | ND | 0.01 |
| MCPA | 94-74-6 | ND | 20 |
| MCPP | 7085-19-0 | ND | 20 |
| (2,4,5-Trichlorophenoxy) acetic acid | 93-76-5 | ND | 0.04 |
| 2-[2,4,5-Trichlorophenoxy] propionic acid | 93-72-1 | ND | 0.02 |

| Surrogates | | Recovery (%) | QC Limits (%) |
|---|---|---|---|
| 2,4-Dichlorophenylacetic acid | 19719-28-9 | 112 | 50 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | METHOD BLANK | Date Sampled: | -- |
| Lab Number: | 9407188-09A | Date Received: | -- |
| Sample Matrix/Media: | SOIL | Date Extracted: | 08/21/94 |
| Extraction Method: | EPA 8150 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8150 | Analyst: | DTT |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Chlorinated Herbicides | | | |
| Dalapon | 75-99-0 | ND | 1 |
| Dicamba | 1918-00-9 | ND | 0.04 |
| 2,4-Dichlorophenoxyacetic acid | 94-75-7 | ND | 0.2 |
| 4-[2,4-Dichlorophenoxyl] butyric acid | 94-82-6 | ND | 0.2 |
| Dichloroprop | 120-36-5 | ND | 0.1 |
| Dinoseb | 88-85-7 | ND | 0.01 |
| MCPA | 94-74-6 | ND | 20 |
| MCPP | 7085-19-0 | ND | 20 |
| (2,4,5-Trichlorophenoxy) acetic acid | 93-76-5 | ND | 0.04 |
| 2-[2,4,5-Trichlorophenoxy] propionic acid | 93-72-1 | ND | 0.02 |
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2,4-Dichlorophenylacetic acid | 19719-28-9 | 76 | 50 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-1 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-01E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/27/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Polynuclear Aromatic Hydrocarbons | | | |
| Acenaphthene | 83-32-9 | ND | 1 |
| Acenaphthylene | 208-96-8 | ND | 1 |
| Anthracene | 120-12-7 | ND | 1 |
| Benzo(a)anthracene | 56-55-3 | ND | 1 |
| Benzo(a)pyrene | 50-32-8 | ND | 1 |
| Benzo(b)fluoranthene | 205-99-2 | ND | 1 |
| Benzo(ghi)perylene | 191-24-2 | ND | 1 |
| Benzo(k)fluoranthene | 207-08-9 | ND | 1 |
| Chrysene | 218-01-9 | ND | 1 |
| Dibenzo(a,h)anthracene | 53-70-3 | ND | 1 |
| Fluoranthene | 206-44-0 | ND | 1 |
| Fluorene | 86-73-7 | ND | 1 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ND | 1 |
| Naphthalene | 91-20-3 | ND | 1 |
| Phenanthrene | 85-01-8 | ND | 1 |
| Pyrene | 129-00-0 | ND | 1 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-1 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-01E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/27/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2-Fluorobiphenyl | 321-60-8 | 83 | 30 - 115 |
| Nitrobenzene-d5 | 4165-60-0 | 89 | 23 - 120 |
| Terphenyl-d14 | 98904-43-9 | 94 | 18 - 137 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
Note: Detection limits increased due to matrix interference.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

Sample Identification: SED-2
Lab Number: 9407188-02E
Sample Matrix/Media: SOIL
Extraction Method: EPA 3550
Method Reference: EPA 8270

Date Sampled: 07/14/94
Date Received: 07/15/94
Date Extracted: 07/25/94
Date Analyzed: 07/27/94
Analyst: ASC

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Polynuclear Aromatic Hydrocarbons | | | |
| Acenaphthene | 83-32-9 | ND | 1 |
| Acenaphthylene | 208-96-8 | ND | 1 |
| Anthracene | 120-12-7 | ND | 1 |
| Benzo(a)anthracene | 56-55-3 | ND | 1 |
| Benzo(a)pyrene | 50-32-8 | ND | 1 |
| Benzo(b)fluoranthene | 205-99-2 | ND | 1 |
| Benzo(ghi)perylene | 191-24-2 | ND | 1 |
| Benzo(k)fluoranthene | 207-08-9 | ND | 1 |
| Chrysene | 218-01-9 | 1 | 1 |
| Dibenzo(a,h)anthracene | 53-70-3 | ND | 1 |
| Fluoranthene | 206-44-0 | 2 | 1 |
| Fluorene | 86-73-7 | ND | 1 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ND | 1 |
| Naphthalene | 91-20-3 | ND | 1 |
| Phenanthrene | 85-01-8 | 1 | 1 |
| Pyrene | 129-00-0 | 2 | 1 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-2 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-02E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/27/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2-Fluorobiphenyl | 321-60-8 | 85 | 30 - 115 |
| Nitrobenzene-d5 | 4165-60-0 | 93 | 23 - 120 |
| Terphenyl-d14 | 98904-43-9 | 99 | 18 - 137 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
Note: Detection limits increased due to matrix interference.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-3 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-03E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/27/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Polynuclear Aromatic Hydrocarbons | | | |
| Acenaphthene | 83-32-9 | ND | 1 |
| Acenaphthylene | 208-96-8 | ND | 1 |
| Anthracene | 120-12-7 | ND | 1 |
| Benzo(a)anthracene | 56-55-3 | 1 | 1 |
| Benzo(a)pyrene | 50-32-8 | 2 | 1 |
| Benzo(b)fluoranthene | 205-99-2 | 1 | 1 |
| Benzo(ghi)perylene | 191-24-2 | 1 | 1 |
| Benzo(k)fluoranthene | 207-08-9 | 2 | 1 |
| Chrysene | 218-01-9 | 2 | 1 |
| Dibenzo(a,h)anthracene | 53-70-3 | ND | 1 |
| Fluoranthene | 206-44-0 | 3 | 1 |
| Fluorene | 86-73-7 | ND | 1 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 1 | 1 |
| Naphthalene | 91-20-3 | ND | 1 |
| Phenanthrene | 85-01-8 | 1 | 1 |
| Pyrene | 129-00-0 | 3 | 1 |

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-3 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-03E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/27/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2-Fluorobiphenyl | 321-60-8 | 81 | 30 - 115 |
| Nitrobenzene-d5 | 4165-60-0 | 89 | 23 - 120 |
| Terphenyl-d14 | 98904-43-9 | 92 | 18 - 137 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
Note: Detection limits increased due to matrix interference.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | NAT-3 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-04E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/27/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Polynuclear Aromatic Hydrocarbons | | | |
| Acenaphthene | 83-32-9 | ND | 0.2 |
| Acenaphthylene | 208-96-8 | ND | 0.2 |
| Anthracene | 120-12-7 | ND | 0.2 |
| Benzo(a)anthracene | 56-55-3 | ND | 0.2 |
| Benzo(a)pyrene | 50-32-8 | ND | 0.2 |
| Benzo(b)fluoranthene | 205-99-2 | ND | 0.2 |
| Benzo(ghi)perylene | 191-24-2 | ND | 0.2 |
| Benzo(k)fluoranthene | 207-08-9 | ND | 0.2 |
| Chrysene | 218-01-9 | ND | 0.2 |
| Dibenzo(a,h)anthracene | 53-70-3 | ND | 0.2 |
| Fluoranthene | 206-44-0 | ND | 0.2 |
| Fluorene | 86-73-7 | ND | 0.2 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ND | 0.2 |
| Naphthalene | 91-20-3 | ND | 0.2 |
| Phenanthrene | 85-01-8 | ND | 0.2 |
| Pyrene | 129-00-0 | ND | 0.2 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | NAT-3 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-04E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/27/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2-Fluorobiphenyl | 321-60-8 | 73 | 30 - 115 |
| Nitrobenzene-d5 | 4165-60-0 | 81 | 23 - 120 |
| Terphenyl-d14 | 98904-43-9 | 87 | 18 - 137 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-4 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-05E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/27/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Polynuclear Aromatic Hydrocarbons | | | |
| Acenaphthene | 83-32-9 | ND | 1 |
| Acenaphthylene | 208-96-8 | ND | 1 |
| Anthracene | 120-12-7 | ND | 1 |
| Benzo(a)anthracene | 56-55-3 | ND | 1 |
| Benzo(a)pyrene | 50-32-8 | ND | 1 |
| Benzo(b)fluoranthene | 205-99-2 | ND | 1 |
| Benzo(ghi)perylene | 191-24-2 | ND | 1 |
| Benzo(k)fluoranthene | 207-08-9 | ND | 1 |
| Chrysene | 218-01-9 | ND | 1 |
| Dibenzo(a,h)anthracene | 53-70-3 | ND | 1 |
| Fluoranthene | 206-44-0 | ND | 1 |
| Fluorene | 86-73-7 | ND | 1 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ND | 1 |
| Naphthalene | 91-20-3 | ND | 1 |
| Phenanthrene | 85-01-8 | ND | 1 |
| Pyrene | 129-00-0 | ND | 1 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-4 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-05E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/27/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2-Fluorobiphenyl | 321-60-8 | 77 | 30 - 115 |
| Nitrobenzene-d5 | 4165-60-0 | 77 | 23 - 120 |
| Terphenyl-d14 | 98904-43-9 | 88 | 18 - 137 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
Note: Detection limits increased due to matrix interference.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-5 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-06E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/27/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Polynuclear Aromatic Hydrocarbons | | | |
| Acenaphthene | 83-32-9 | ND | 0.2 |
| Acenaphthylene | 208-96-8 | ND | 0.2 |
| Anthracene | 120-12-7 | ND | 0.2 |
| Benzo(a)anthracene | 56-55-3 | ND | 0.2 |
| Benzo(a)pyrene | 50-32-8 | ND | 0.2 |
| Benzo(b)fluoranthene | 205-99-2 | ND | 0.2 |
| Benzo(ghi)perylene | 191-24-2 | ND | 0.2 |
| Benzo(k)fluoranthene | 207-08-9 | ND | 0.2 |
| Chrysene | 218-01-9 | ND | 0.2 |
| Dibenzo(a,h)anthracene | 53-70-3 | ND | 0.2 |
| Fluoranthene | 206-44-0 | ND | 0.2 |
| Fluorene | 86-73-7 | ND | 0.2 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ND | 0.2 |
| Naphthalene | 91-20-3 | ND | 0.2 |
| Phenanthrene | 85-01-8 | ND | 0.2 |
| Pyrene | 129-00-0 | ND | 0.2 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-5 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-06E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/27/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2-Fluorobiphenyl | 321-60-8 | 76 | 30 - 115 |
| Nitrobenzene-d5 | 4165-60-0 | 85 | 23 - 120 |
| Terphenyl-d14 | 98904-43-9 | 91 | 18 - 137 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-7 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-08E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/27/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Polynuclear Aromatic Hydrocarbons | | | |
| Acenaphthene | 83-32-9 | ND | 0.2 |
| Acenaphthylene | 208-96-8 | ND | 0.2 |
| Anthracene | 120-12-7 | ND | 0.2 |
| Benzo(a)anthracene | 56-55-3 | ND | 0.2 |
| Benzo(a)pyrene | 50-32-8 | ND | 0.2 |
| Benzo(b)fluoranthene | 205-99-2 | ND | 0.2 |
| Benzo(ghi)perylene | 191-24-2 | ND | 0.2 |
| Benzo(k)fluoranthene | 207-08-9 | ND | 0.2 |
| Chrysene | 218-01-9 | ND | 0.2 |
| Dibenzo(a,h)anthracene | 53-70-3 | ND | 0.2 |
| Fluoranthene | 206-44-0 | ND | 0.2 |
| Fluorene | 86-73-7 | ND | 0.2 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ND | 0.2 |
| Naphthalene | 91-20-3 | ND | 0.2 |
| Phenanthrene | 85-01-8 | ND | 0.2 |
| Pyrene | 129-00-0 | ND | 0.2 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-7 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-08E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/27/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2-Fluorobiphenyl | 321-60-8 | 70 | 30 - 115 |
| Nitrobenzene-d5 | 4165-60-0 | 78 | 23 - 120 |
| Terphenyl-d14 | 98904-43-9 | 82 | 18 - 137 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | METHOD BLANK | Date Sampled: | -- |
| Lab Number: | 9407188-09A | Date Received: | -- |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Polynuclear Aromatic Hydrocarbons | | | |
| Acenaphthene | 83-32-9 | ND | 0.2 |
| Acenaphthylene | 208-96-8 | ND | 0.2 |
| Anthracene | 120-12-7 | ND | 0.2 |
| Benzo(a)anthracene | 56-55-3 | ND | 0.2 |
| Benzo(a)pyrene | 50-32-8 | ND | 0.2 |
| Benzo(b)fluoranthene | 205-99-2 | ND | 0.2 |
| Benzo(ghi)perylene | 191-24-2 | ND | 0.2 |
| Benzo(k)fluoranthene | 207-08-9 | ND | 0.2 |
| Chrysene | 218-01-9 | ND | 0.2 |
| Dibenzo(a,h)anthracene | 53-70-3 | ND | 0.2 |
| Fluoranthene | 206-44-0 | ND | 0.2 |
| Fluorene | 86-73-7 | ND | 0.2 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ND | 0.2 |
| Naphthalene | 91-20-3 | ND | 0.2 |
| Phenanthrene | 85-01-8 | ND | 0.2 |
| Pyrene | 129-00-0 | ND | 0.2 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | METHOD BLANK | Date Sampled: | -- |
| Lab Number: | 9407188-09A | Date Received: | -- |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2-Fluorobiphenyl | 321-60-8 | 77 | 30 - 115 |
| Nitrobenzene-d5 | 4165-60-0 | 84 | 23 - 120 |
| Terphenyl-d14 | 98904-43-9 | 86 | 18 - 137 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-1 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-01 | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | | |

| Analyte | Concentration | Method Detection Limit | Units | Date Prepared | Date Analyzed | Prep Method | Method Reference |
|---|---|---|---|---|---|---|---|
| Antimony | 1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Arsenic | 2 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Barium | 73 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Beryllium | 0.2 | 0.1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cadmium | <0.5 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Chromium | 56 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cobalt | 11 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Copper | 37 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Lead | 41 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Mercury | 0.1 | 0.1 | mg/kg | 07/21/94 | 07/21/94 | EPA 7471 | EPA 7471 |
| Molybdenum | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Nickel | 48 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Selenium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Silver | <0.5 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| TPH-D | 610 a | 1 | mg/kg | 07/22/94 | 07/27/94 | EPA 3550 | EPA 8015* |
| TRPH | 1000 | 30 | mg/kg | 07/25/94 | 07/26/94 | EPA 9071 | EPA 9073 |
| Thallium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Vanadium | 46 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Zinc | 120 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-D = Extractable petroleum hydrocarbons from C10 to C42 quantitated as diesel.
* = Modified
TRPH = Total Recoverable Petroleum Hydrocarbons
a Unidentifiable hydrocarbons do not match the typical diesel pattern.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

|  |  |  |  |
|---|---|---|---|
| Sample Identification: | SED-2 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-02 | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL |  |  |

| Analyte | Concentration | Method Detection Limit | Units | Date Prepared | Date Analyzed | Prep Method | Method Reference |
|---|---|---|---|---|---|---|---|
| Antimony | 2 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Arsenic | 2 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Barium | 76 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Beryllium | 0.2 | 0.1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cadmium | <0.5 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Chromium | 72 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cobalt | 14 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Copper | 35 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Lead | 32 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| rcury | <0.1 | 0.1 | mg/kg | 07/21/94 | 07/21/94 | EPA 7471 | EPA 7471 |
| lybdenum | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Nickel | 57 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Selenium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Silver | <0.5 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| TPH-D | 69 a | 1 | mg/kg | 07/22/94 | 07/24/94 | EPA 3550 | EPA 8015* |
| TRPH | 580 | 30 | mg/kg | 07/25/94 | 07/26/94 | EPA 9071 | EPA 9073 |
| Thallium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Vanadium | 59 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Zinc | 91 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-D = Extractable petroleum hydrocarbons from C10 to C42 quantitated as diesel.
* = Modified
TRPH = Total Recoverable Petroleum Hydrocarbons
a Sample does not match the typical diesel pattern.
Sample appears to be oil.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-3 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-03 | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | | |

| Analyte | Concentration | Method Detection Limit | Units | Date Prepared | Date Analyzed | Prep Method | Method Reference |
|---|---|---|---|---|---|---|---|
| Antimony | 2 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Arsenic | 2 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Barium | 72 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Beryllium | 0.2 | 0.1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cadmium | 0.8 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Chromium | 36 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cobalt | 8 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Copper | 48 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Lead | 75 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| cury | 0.2 | 0.1 | mg/kg | 07/21/94 | 07/21/94 | EPA 7471 | EPA 7471 |
| ybdenum | 1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Nickel | 31 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Selenium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Silver | <0.5 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| TPH-D | 300 a | 1 | mg/kg | 07/22/94 | 07/24/94 | EPA 3550 | EPA 8015* |
| TRPH | 1600 | 30 | mg/kg | 07/25/94 | 07/26/94 | EPA 9071 | EPA 9073 |
| Thallium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Vanadium | 32 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Zinc | 200 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-D = Extractable petroleum hydrocarbons from C10 to C42 quantitated as diesel.
* = Modified
TRPH = Total Recoverable Petroleum Hydrocarbons
a Sample does not match the typical diesel pattern.
Sample appears to be oil.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | NAT-3 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-04 | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | | |

| Analyte | Concentration | | Method Detection Limit | Units | Date Prepared | Date Analyzed | Prep Method | Method Reference |
|---|---|---|---|---|---|---|---|---|
| Antimony | 2 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Arsenic | 2 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Barium | 170 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Beryllium | 0.3 | | 0.1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cadmium | <0.5 | | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Chromium | 89 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cobalt | 18 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Copper | 41 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Lead | 5 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| rcury | <0.1 | | 0.1 | mg/kg | 07/21/94 | 07/21/94 | EPA 7471 | EPA 7471 |
| lybdenum | <1 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Nickel | 80 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Selenium | <1 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Silver | 0.6 | | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| TPH-D | 29 | a | 1 | mg/kg | 07/22/94 | 07/24/94 | EPA 3550 | EPA 8015* |
| TRPH | 50 | | 30 | mg/kg | 07/25/94 | 07/26/94 | EPA 9071 | EPA 9073 |
| Thallium | <1 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Vanadium | 72 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Zinc | 62 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-D = Extractable petroleum hydrocarbons from C10 to C42 quantitated as diesel.
* = Modified
TRPH = Total Recoverable Petroleum Hydrocarbons
a Sample does not match the typical diesel pattern.
Sample appears to be oil.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-4 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-05 | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | | |

| Analyte | Concentration | | Method Detection Limit | Units | Date Prepared | Date Analyzed | Prep Method | Method Reference |
|---|---|---|---|---|---|---|---|---|
| Antimony | 2 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Arsenic | 1 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Barium | 81 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Beryllium | 0.3 | | 0.1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cadmium | <0.5 | | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Chromium | 100 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cobalt | 18 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Copper | 38 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Lead | 7 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Mercury | <0.1 | | 0.1 | mg/kg | 07/21/94 | 07/21/94 | EPA 7471 | EPA 7471 |
| Molybdenum | <1 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Nickel | 80 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Selenium | <1 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Silver | 0.9 | | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| TPH-D | 57 | a | 1 | mg/kg | 07/22/94 | 07/24/94 | EPA 3550 | EPA 8015* |
| TRPH | 40 | | 30 | mg/kg | 07/25/94 | 07/26/94 | EPA 9071 | EPA 9073 |
| Thallium | <1 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Vanadium | 82 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Zinc | 67 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-D = Extractable petroleum hydrocarbons from C10 to C42 quantitated as diesel.
* = Modified
TRPH = Total Recoverable Petroleum Hydrocarbons
a Sample does not match the typical diesel pattern.
Sample appears to be oil.

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-5 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-06 | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | | |

| Analyte | Concentration | | Method Detection Limit | Units | Date Prepared | Date Analyzed | Prep Method | Method Reference |
|---|---|---|---|---|---|---|---|---|
| Antimony | 2 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Arsenic | <1 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Barium | 91 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Beryllium | 0.3 | | 0.1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cadmium | <0.5 | | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Chromium | 110 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cobalt | 20 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Copper | 38 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Lead | 5 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Mercury | <0.1 | | 0.1 | mg/kg | 07/21/94 | 07/21/94 | EPA 7471 | EPA 7471 |
| Molybdenum | <1 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Nickel | 92 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Selenium | <1 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Silver | 0.7 | | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| TPH-D | 37 | a | 1 | mg/kg | 07/22/94 | 07/24/94 | EPA 3550 | EPA 8015* |
| TRPH | 80 | | 30 | mg/kg | 07/25/94 | 07/26/94 | EPA 9071 | EPA 9073 |
| Thallium | <1 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Vanadium | 83 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Zinc | 66 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-D = Extractable petroleum hydrocarbons from C10 to C42 quantitated as diesel.
* = Modified
TRPH = Total Recoverable Petroleum Hydrocarbons
a Sample does not match the typical diesel pattern.
Sample appears to be oil.

# Quality Assurance Results Summary
for
Clayton Project No. 94071.89

| | |
|---|---|
| Clayton Lab Number: | 9407196-06A |
| Ext./Prep. Method: | EPA418_1 |
| Date: | 07/25/94 |
| Analyst: | HYT |
| Std. Source: | E940627-01W |
| Sample Matrix/Media: | SOIL |

| | |
|---|---|
| Analytical Method: | EPA418_1 |
| Instrument ID: | TAHYD |
| Date: | 07/26/94 |
| Time: | 09:00 |
| Analyst: | AMN |
| Units: | MG/KG |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL PETROLEUM HYDROCARBONS | ND | 219 | 194 | 89 | 191 | 88 | 88 | 50 | 150 | 1.6 | 25 |

LCS = Laboratory Control Sample
ND = Not detected at or above limit of detection
LCL = Lower Control Limit
UCL = Upper Control Limit
SOR = Spike out of range due to high sample concentration.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-7 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-08 | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | | |

| Analyte | Concentration | | Method Detection Limit | Units | Date Prepared | Date Analyzed | Prep Method | Method Reference |
|---|---|---|---|---|---|---|---|---|
| Antimony | 2 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Arsenic | 2 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Barium | 86 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Beryllium | 0.3 | | 0.1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cadmium | <0.5 | | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Chromium | 120 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cobalt | 18 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Copper | 41 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Lead | 7 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| rcury | <0.1 | | 0.1 | mg/kg | 07/21/94 | 07/21/94 | EPA 7471 | EPA 7471 |
| lybdenum | <1 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Nickel | 90 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Selenium | <1 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Silver | <0.5 | | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| TPH-D | 34 | a | 1 | mg/kg | 07/22/94 | 07/24/94 | EPA 3550 | EPA 8015* |
| TRPH | 40 | | 30 | mg/kg | 07/25/94 | 07/26/94 | EPA 9071 | EPA 9073 |
| Thallium | <1 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Vanadium | 80 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Zinc | 70 | | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-D = Extractable petroleum hydrocarbons from C10 to C42 quantitated as diesel.
* = Modified
TRPH = Total Recoverable Petroleum Hydrocarbons
a Sample does not match the typical diesel pattern.
Sample appears to be oil.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | METHOD BLANK | Date Sampled: | -- |
| Lab Number: | 9407188-09 | Date Received: | -- |
| Sample Matrix/Media: | SOIL | | |

| Analyte | Concentration | Method Detection Limit | Units | Date Prepared | Date Analyzed | Prep Method | Method Reference |
|---|---|---|---|---|---|---|---|
| Antimony | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Arsenic | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Barium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Beryllium | <0.1 | 0.1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cadmium | <0.5 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Chromium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cobalt | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Copper | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Lead | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| [illegible]rcury | <0.1 | 0.1 | mg/kg | 07/21/94 | 07/21/94 | EPA 7471 | EPA 7471 |
| [illegible]lybdenum | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Nickel | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Selenium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Silver | <0.5 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| TPH-D | ND | 1 | mg/kg | 07/22/94 | 07/24/94 | EPA 3550 | EPA 8015* |
| TRPH | ND | 30 | mg/kg | 07/25/94 | 07/26/94 | EPA 9071 | EPA 9073 |
| Thallium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Vanadium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Zinc | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-D = Extractable petroleum hydrocarbons from C10 to C42 quantitated as diesel.
* = Modified
TRPH = Total Recoverable Petroleum Hydrocarbons

# CHAIN OF CUSTODY

Pg 1/2

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118
(408) 265-2600

FC 1019 (07-23-90)

Site Name: ADOBE CREEK
Incident ID#:
Scope Number: 2-1010-101-458

LABORATORY: Clayton
Sampled by (Print): Mary Bannister - Terratech
Requested By: Presley
Site Location: ADOBE SEDIMENTS

(9407188 + 9407189)

| Sample ID# | Date Sampled | Time Sampled | Matrix | No. of Samples | Turn Around Time | Analyses Requested → | ~~EPA 624~~ 8080 | ~~EPA 625~~ 8150 | 8100 PAH | Title 26 metals - | TPH & | 418.1 | | Preservation | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SED 1 | 7-14-94 | 10:00 AM | S | 4J | NR | | X | X | X | X | X | X | 9407188 | (01) (A-F) | Use contents |
| SED-2 | ↓ | 10:15 AM | ↓ | ↓ | ↓ | | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | -02 ↓ | of glass jars |
| SED-3 | | 11:00 AM | | | | | | | | | | | | -03 | for all metal |
| NAT-3 | | 11:10 AM | | | | | | | | | | | | -04 | analyses, brass |
| SED 4 | | 9:40 AM | | | | | | | | | | | | -05 | liners for others |
| SED-5 | | 12:00 | | | | | | | | | | | | -06 | |
| SED-6 | | 12:00 | | | | | | | | | | | | -07 | Composite 4 brass * |
| SED-7 | | 12:30 | | | | | | | | | | | | -08 | liners for all analyses |
| SED-8 | | 12:30 | | | | | | | | | | | 9407189 | (01) | besides metals. |
| SED-9 | ↓ | 1:00 | ↓ | ↓ | ↓ | | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | (02) ↓ | (jar was field composited) |

MATRIX ABBREVIATION - Soil = S; Water = W; Product = P

(2x6 BC - A→D Comp. to CREATE = E
500ml GLASS JAR - F

***Laboratory shall sign upon receipt and return a copy of this form with laboratory results.***

| Relinquished By (Signatures)/Affiliation: | Received By (Signatures)/Affiliation: | Date | Time |
|---|---|---|---|
| ① Mary Bannister Terratech | ② Peter Shepley / SCVWD | 7/14/94 | 3:05 pm |
| Peter Shepley ③ | ④ Refrigerator | 7/14/94 | 4:10 pm |
| SCVWD William Springer ⑤ | ⑥ [illegible] C.S.I. AERO | 7-15-94 | 9:00 am |
| Aero DEL ⑦ | ⑧ [illegible] - Clayton | 7-15-94 | 10:50 Am |

Distribution: Original - RETURN TO DISTRICT WITH RESULTS, Pink - Laboratory, Yellow - District

Page 1 of 2

*-DID NOT RECEIVE

# CHAIN OF CUSTODY

Pg 2/2

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118
(408) 265-2600

FC 1019 (07-23-90)

Site Name: ADOBE CREEK
Incident ID#:
Scope Number: 2-1010-101-458
LABORATORY: CLAYTON
Sampled by (Print): MARY BANNISTER TERNATCH
Requested By: PRESLEY
Site Location: ADOBE SEDIMENT

(9407188 + 9407189)

| Sample ID# | Date Sampled | Time Sampled | Matrix | No. of Samples | Turn Around Time | Analyses Requested → | EPA ~~624~~ 8080 | EPA ~~625~~ 8150 | 8100 PAH | TITLE 26 METALS | TPH D | 418.1 | | | Preservation | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SED-10 | 7-14-94 | 1:30 | S | 4L J | NOR | | X | X | X | X | X | X | 9407189 | | (A-F C3) | USE CONTENTS OF * |
| SED-11 | ↓ | 2:30 | ↓ | ↓ | ↓ | | X | X | X | X | X | X | | ↓ | (04)↓ | GLASS JARS FOR METALS |
| | | | | | | | | | | | | | | | | BRASS LINERS FOR |
| | | | | | | | | | | | | | | | | OTHERS (PLEASE COMPOSITE |
| | | | | | | | | | | | | | | | | 4 LINERS IN EA SET) |
| | | | | | | | | | | | | | | | | ~~Composite 4-6~~ |
| | | | | | | | | | | | | | | | | (jar was composited |
| | | | | | | | | | | | | | | | | in the field) |
| | | | | | | | | | | | | | | | (2 x 6 | BC A→D Comp. to create = E |
| | | | | | | | | | | | | | | | glass | 500mL jar - F) |

MATRIX ABBREVIATION - Soil = S; Water = W; Product = P

***Laboratory shall sign upon receipt and return a copy of this form with laboratory results.***

| Relinquished By (Signatures)/Affiliation: | Received By (Signatures)/Affiliation: | Date | Time |
|---|---|---|---|
| Mary Bannister Ternatch ⓐ | © [illegible] / SCVWD | 7/14/94 | 3:05 pm. |
| [illegible] ⑤ | ④ [illegible] | [illegible] | [illegible] |
| SCVWD [illegible] ⑤ | ⑥ [illegible] 631 AERO | 7-15-94 | 9 am |
| [illegible] ⑦ | ⑧ [illegible] / Clayton | 7-15-94 | 10:52 Am |

Distribution: Original - RETURN TO DISTRICT WITH RESULTS, Pink - Laboratory, Yellow - District

Page 2 of 2

* DID NOT RECEIVE

# Quality Assurance Results Summary

## Matrix Spike/Matrix Spike Duplicate Results

for

Clayton Project No. 94071.88

# Quality Assurance Results Summary
for
Clayton Project No. 94071.88

| | |
|---|---|
| Clayton Lab Number: | 9407188-MB |
| Ext./Prep. Method: | EPA3550 |
| Date: | 07/25/94 |
| Analyst: | AMN |
| Std. Source: | G940715-01W |
| Sample Matrix/Media: | SOIL |

| | |
|---|---|
| Analytical Method: | EPA8015 |
| Instrument ID: | 02883 |
| Date: | 07/25/94 |
| Time: | 01:55 |
| Analyst: | AMN |
| Units: | MG/KG |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DIESEL | ND | 20.0 | 26.6 | 133 | 25.7 | 129 | 131 | 51 | 147 | 3.3 | 30 |

LCS = Laboratory Control Sample
ND = Not detected at or above limit of detection
LCL = Lower Control Limit
UCL = Upper Control Limit
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary
for
Clayton Project No. 94071.88

| | |
|---|---|
| Clayton Lab Number: | 9407188-08E |
| Ext./Prep. Method: | EPA8150 |
| Date: | 07/21/94 |
| Analyst: | HYT |
| Std. Source: | G940715-05W |
| Sample Matrix/Media: | SOIL |

| | |
|---|---|
| Analytical Method: | EPA8150 |
| Instrument ID: | 02933 |
| Date: | 07/26/94 |
| Time: | 22:35 |
| Analyst: | DTT |
| Units: | MG/KG |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | 0.0400 | 0.0378 | 95 | 0.0370 | 93 | 94 | 40 | 125 | 2.1 | 40 |
| 2,4-D | ND | 0.0500 | 0.0539 | 108 | 0.0546 | 109 | 109 | 40 | 125 | 1.3 | 40 |
| 2,4-DB | ND | 0.320 | 0.152 | 48 | 0.224 | 70 | 59 | 40 | 125 | 38 | 40 |
| DINOSEB | ND | 0.0800 | 0.0344 | 43 | 0.0393 | 49 | 46 | 40 | 125 | 13 | 40 |
| SILVEX | ND | 0.0400 | 0.0251 | 63 | 0.0350 | 88 | 75 | 40 | 125 | 33 | 40 |

LCS = Laboratory Control Sample
LCL = Lower Control Limit
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SOR = Spike out of range due to high sample concentration.

# Quality Assurance Results Summary
for
Clayton Project No. 94071.88

| | |
|---|---|
| Clayton Lab Number: | 9407139-08A |
| Ext./Prep. Method: | EPA3050 |
| Date: | 07/20/94 |
| Analyst: | RB |
| Std. Source: | VHG400660 |
| Sample Matrix/Media: | SOIL |

| | |
|---|---|
| Analytical Method: | EPA6010 |
| Instrument ID: | 03891 |
| Date: | 07/21/94 |
| Time: | 09:04 |
| Analyst: | RAH |
| Units: | MG/KG |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ANTIMONY | ND | 50.0 | 49.6 | 99 | 49.1 | 98 | 99 | 64 | 114 | 1.0 | 25 |
| ARSENIC | 1.20 | 50.0 | 52.3 | 102 | 50.8 | 99 | 101 | 80 | 110 | 2.9 | 25 |
| BARIUM | 25.2 | 50.0 | 78.1 | 106 | 77.1 | 104 | 105 | 48 | 159 | 1.3 | 25 |
| BERYLLIUM | ND | 50.0 | 49.9 | 100 | 50.1 | 100 | 100 | 83 | 113 | 0.4 | 25 |
| CADMIUM | ND | 50.0 | 51.2 | 102 | 51.0 | 102 | 102 | 80 | 111 | 0.4 | 25 |
| CHROMIUM | 21.0 | 50.0 | 71.8 | 102 | 70.6 | 99 | 100 | 74 | 124 | 1.7 | 25 |
| COBALT | 3.50 | 50.0 | 54.8 | 103 | 54.9 | 103 | 103 | 78 | 113 | 0.2 | 25 |
| COPPER | 3.90 | 50.0 | 56.0 | 104 | 52.0 | 96 | 100 | 71 | 126 | 7.4 | 25 |
| LEAD | 1.10 | 50.0 | 51.8 | 101 | 52.0 | 102 | 102 | 61 | 124 | 0.4 | 25 |
| MOLYBDENUM | ND | 50.0 | 48.9 | 98 | 49.6 | 99 | 99 | 69 | 119 | 1.4 | 25 |
| NICKEL | 19.1 | 50.0 | 71.2 | 104 | 71.1 | 104 | 104 | 68 | 125 | 0.1 | 25 |
| SELENIUM | ND | 50.0 | 49.6 | 99 | 49.1 | 98 | 99 | 63 | 117 | 1.0 | 25 |
| SILVER | ND | 50.0 | 51.3 | 103 | 49.3 | 99 | 101 | 79 | 118 | 4.0 | 25 |
| THALLIUM | ND | 50.0 | 50.9 | 102 | 51.2 | 102 | 102 | 60 | 123 | 0.6 | 25 |
| VANADIUM | 13.7 | 50.0 | 64.0 | 101 | 63.6 | 100 | 100 | 70 | 122 | 0.6 | 25 |
| ZINC | 11.8 | 50.0 | 63.8 | 104 | 62.8 | 102 | 103 | 64 | 133 | 1.6 | 25 |

LCS = Laboratory Control Sample
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# Quality Assurance Results Summary
for
Clayton Project No. 94071.88

| | |
|---|---|
| Clayton Lab Number: | 9407188-01F |
| Ext./Prep. Method: | EPA7471 |
| Date: | 07/21/94 |
| Analyst: | HYW |
| Std. Source: | A940502A |
| Sample Matrix/Media: | SOIL |

| | |
|---|---|
| Analytical Method: | EPA7471 |
| Instrument ID: | 05583 |
| Date: | 07/21/94 |
| Time: | 14:24 |
| Analyst: | HYW |
| Units: | mg/Kg |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MERCURY | 0.110 | 1.00 | 1.05 | 94 | 1.01 | 90 | 92 | 75 | 125 | 3.9 | 25 |

LCS = Laboratory Control Sample
LCL = Lower Control Limit
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SOR = Spike out of range due to high sample concentration.

# Quality Assurance Results Summary
for
Clayton Project No. 94071.88

Clayton Lab Number: 9407188-08E
Ext./Prep. Method: EPA 3550
Date: 07/25/94
Analyst: GUD
Std. Source: G940705-06W
Sample Matrix/Media: SOIL

Analytical Method: EPA8270
Instrument ID: 07477
Date: 07/27/94
Time: 14:43
Analyst: ASC
Units: MG/KG

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (A) Phenol | ND | 2.53 | 2.17 | 86 | 2.39 | 94 | 90 | 26 | 90 | 9.6 | 35 |
| (B) 2-Chlorophenol | ND | 2.53 | 2.04 | 81 | 2.12 | 84 | 82 | 25 | 102 | 3.8 | 50 |
| (C) 1,4-Dichlorobenzene | ND | 1.67 | 1.30 | 78 | 1.36 | 81 | 80 | 28 | 104 | 4.5 | 27 |
| (D) N-Nitrosodipropylamine | ND | 1.67 | 1.49 | 89 | 1.54 | 92 | 91 | 41 | 126 | 3.3 | 38 |
| (E) 1,2,4-Trichlorobenzene | ND | 1.67 | 1.32 | 79 | 1.37 | 82 | 81 | 38 | 107 | 3.7 | 23 |
| (F) 4-Chloro-m-cresol | ND | 2.53 | 2.30 | 91 | 2.29 | 91 | 91 | 26 | 103 | 0.4 | 33 |
| (G) Acenaphthene | ND | 2.53 | 1.51 | 60 | 1.54 | 61 | 60 | 31 | 137 | 2.0 | 19 |
| (H) 4-Nitrophenol | ND | 2.53 | 2.01 | 79 | 1.93 | 76 | 78 | 11 | 114 | 4.1 | 50 |
| (I) 2,4-Dinitrotoluene | ND | 1.67 | 1.23 | 74 | 1.26 | 75 | 75 | 28 | 89 | 2.4 | 47 |
| (J) Pentachlorophenol | ND | 2.53 | 1.06 | 42 | 1.52 | 60 | 51 | 17 | 109 | 36 | 47 |
| (K) Pyrene | ND | 1.67 | 1.62 | 97 | 1.75 | 105 | 101 | 35 | 142 | 7.7 | 36 |

LCS = Laboratory Control Sample
ND = Not detected at or above limit of detection
LCL = Lower Control Limit
UCL = Upper Control Limit
SOR = Spike out of range due to high sample concentration.

# Quality Assurance Results Summary
for
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Clayton Lab Number: | 9407204-01A | Analytical Method: | EPA8080 |
| Ext./Prep. Method: | EPA 3550 | Instrument ID: | 07564 |
| Date: | 07/29/94 | Date: | 07/29/94 |
| Analyst: | CTS | Time: | 02:26 |
| Std. Source: | G940715-01W | Analyst: | ASC |
| Sample Matrix/Media: | SOIL | Units: | MG/KG |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDT | ND | 0.0400 | 0.0458 | 115 | 0.0485 | 121 | 118 | 23 | 134 | 5.7 | 50 |
| ALDRIN | ND | 0.0400 | 0.0391 | 98 | 0.0407 | 102 | 100 | 34 | 132 | 4.0 | 43 |
| DIELDRIN | ND | 0.0400 | 0.0464 | 116 | 0.0516 | 129 | 123 | 31 | 134 | 11 | 38 |
| ENDRIN | ND | 0.0400 | 0.0548 | 137 | 0.0554 | 139 | 138 | 42 | 139 | 1.1 | 45 |
| GAMMA-BHC (LINDANE) | ND | 0.0400 | 0.0361 | 90 | 0.0371 | 93 | 92 | 46 | 127 | 2.7 | 50 |
| HEPTACHLOR | ND | 0.0400 | 0.0406 | 102 | 0.0450 | 113 | 107 | 35 | 130 | 10 | 31 |

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

# Quality Assurance Results Summary
for
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Clayton Lab Number: | 9407239-LSC | Analytical Method: | EPA418_1 |
| Ext./Prep. Method: | EPA418_1 | Instrument ID: | TAHYD |
| Date: | 07/25/94 | Date: | 07/26/94 |
| Analyst: | HYT | Time: | 02:30 |
| Std. Source: | ERA 91025 # 1 | Analyst: | AMN |
| Sample Matrix/Media: | SOIL | Units: | MG/KG |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL PETROLEUM HYDROCARBONS | ND | 2,060 | 1,680 | 82 | 1,680 | 82 | 82 | 50 | 150 | 0.0 | 25 |

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary
for
Clayton Project No. 94071.88

|  |  |
|---|---|
| Clayton Lab Number: | 9407196-06A |
| Ext./Prep. Method: | EPA418_1 |
| Date: | 07/25/94 |
| Analyst: | HYT |
| Std. Source: | E940627-01W |
| Sample Matrix/Media: | SOIL |

|  |  |
|---|---|
| Analytical Method: | EPA418_1 |
| Instrument ID: | TAHYD |
| Date: | 07/26/94 |
| Time: | 09:00 |
| Analyst: | AMN |
| Units: | MG/KG |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL PETROLEUM HYDROCARBONS | ND | 219 | 194 | 89 | 191 | 88 | 88 | 50 | 150 | 1.6 | 25 |

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

**Western Operations**

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

**Clayton**
ENVIRONMENTAL
CONSULTANTS

August 2, 1994

Ms. Charleen Renati
SANTA CLARA VALLEY WATER DISTRICT
5750 Almaden Expressway
San Jose, CA  95118

Client Ref.: 94-39/Adobe Creek
Clayton Project No.: 94071.89

Dear Ms. Renati:

Attached is our analytical laboratory report for the samples received on July 15, 1994. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of after September 1, 1994, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Suzanne Silvera, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
Western Operations

HAH/tjb

Attachments

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | SED-8 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-01E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/28/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| **Organochlorine Pesticides** | | | |
| Aldrin | 309-00-2 | ND | 0.003 |
| alpha-BHC | 319-84-6 | ND | 0.003 |
| beta-BHC | 319-85-7 | ND | 0.003 |
| Chlordane | 57-74-9 | ND | 0.02 |
| 4,4'-DDD | 72-54-8 | ND | 0.003 |
| 4,4'-DDE | 72-55-9 | ND | 0.003 |
| 4,4'-DDT | 50-29-3 | ND | 0.003 |
| delta-BHC | 319-86-8 | ND | 0.003 |
| Dieldrin | 60-57-1 | ND | 0.003 |
| Endosulfan I | 959-98-8 | ND | 0.003 |
| Endosulfan II | 33212-65-9 | ND | 0.003 |
| Endosulfan sulfate | 1031-07-8 | ND | 0.003 |
| Endrin | 72-20-8 | ND | 0.003 |
| Endrin aldehyde | 7421-93-4 | ND | 0.003 |
| gamma-BHC (Lindane) | 58-89-9 | ND | 0.003 |
| Heptachlor | 76-44-8 | ND | 0.003 |
| Heptachlor epoxide | 1024-57-3 | ND | 0.003 |
| Methoxychlor | 72-43-5 | ND | 0.02 |
| Toxaphene | 8001-35-2 | ND | 0.2 |
| **Polychlorinated Biphenyls (PCB's)** | | | |
| Aroclor 1016 | 12674-11-2 | ND | 0.1 |
| Aroclor 1221 | 1104-28-2 | ND | 0.1 |
| Aroclor 1232 | 11141-16-5 | ND | 0.08 |
| Aroclor 1242 | 53469-21-9 | ND | 0.08 |
| Aroclor 1248 | 12672-29-6 | ND | 0.08 |
| Aroclor 1254 | 11097-69-1 | ND | 0.08 |
| Aroclor 1260 | 11096-82-5 | ND | 0.08 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | SED-8 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-01E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/28/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| Decachlorobiphenyl | 2051-24-3 | 112 | 20 - 150 |
| Tetrachloro-m-xylene | 877-09-8 | 104 | 24 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | SED-9 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-02E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/28/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Organochlorine Pesticides | | | |
| Aldrin | 309-00-2 | ND | 0.003 |
| alpha-BHC | 319-84-6 | ND | 0.003 |
| beta-BHC | 319-85-7 | ND | 0.003 |
| Chlordane | 57-74-9 | ND | 0.02 |
| 4,4'-DDD | 72-54-8 | ND | 0.003 |
| 4,4'-DDE | 72-55-9 | ND | 0.003 |
| 4,4'-DDT | 50-29-3 | ND | 0.003 |
| delta-BHC | 319-86-8 | ND | 0.003 |
| Dieldrin | 60-57-1 | ND | 0.003 |
| Endosulfan I | 959-98-8 | ND | 0.003 |
| Endosulfan II | 33212-65-9 | ND | 0.003 |
| Endosulfan sulfate | 1031-07-8 | ND | 0.003 |
| Endrin | 72-20-8 | ND | 0.003 |
| Endrin aldehyde | 7421-93-4 | ND | 0.003 |
| gamma-BHC (Lindane) | 58-89-9 | ND | 0.003 |
| Heptachlor | 76-44-8 | ND | 0.003 |
| Heptachlor epoxide | 1024-57-3 | ND | 0.003 |
| Methoxychlor | 72-43-5 | ND | 0.02 |
| Toxaphene | 8001-35-2 | ND | 0.2 |
| Polychlorinated Biphenyls (PCB's) | | | |
| Aroclor 1016 | 12674-11-2 | ND | 0.1 |
| Aroclor 1221 | 1104-28-2 | ND | 0.1 |
| Aroclor 1232 | 11141-16-5 | ND | 0.08 |
| Aroclor 1242 | 53469-21-9 | ND | 0.08 |
| Aroclor 1248 | 12672-29-6 | ND | 0.08 |
| Aroclor 1254 | 11097-69-1 | ND | 0.08 |
| Aroclor 1260 | 11096-82-5 | ND | 0.08 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | SED-9 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-02E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/28/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| Decachlorobiphenyl | 2051-24-3 | 108 | 20 - 150 |
| Tetrachloro-m-xylene | 877-09-8 | 96 | 24 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | SED-11 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-04E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/28/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Organochlorine Pesticides | | | |
| Aldrin | 309-00-2 | ND | 0.003 |
| alpha-BHC | 319-84-6 | ND | 0.003 |
| beta-BHC | 319-85-7 | ND | 0.003 |
| Chlordane | 57-74-9 | ND | 0.02 |
| 4,4'-DDD | 72-54-8 | ND | 0.003 |
| 4,4'-DDE | 72-55-9 | ND | 0.003 |
| 4,4'-DDT | 50-29-3 | ND | 0.003 |
| delta-BHC | 319-86-8 | ND | 0.003 |
| Dieldrin | 60-57-1 | ND | 0.003 |
| Endosulfan I | 959-98-8 | ND | 0.003 |
| Endosulfan II | 33212-65-9 | ND | 0.003 |
| Endosulfan sulfate | 1031-07-8 | ND | 0.003 |
| Endrin | 72-20-8 | ND | 0.003 |
| Endrin aldehyde | 7421-93-4 | ND | 0.003 |
| gamma-BHC (Lindane) | 58-89-9 | ND | 0.003 |
| Heptachlor | 76-44-8 | ND | 0.003 |
| Heptachlor epoxide | 1024-57-3 | ND | 0.003 |
| Methoxychlor | 72-43-5 | ND | 0.02 |
| Toxaphene | 8001-35-2 | ND | 0.2 |
| Polychlorinated Biphenyls (PCB's) | | | |
| Aroclor 1016 | 12674-11-2 | ND | 0.1 |
| Aroclor 1221 | 1104-28-2 | ND | 0.1 |
| Aroclor 1232 | 11141-16-5 | ND | 0.08 |
| Aroclor 1242 | 53469-21-9 | ND | 0.08 |
| Aroclor 1248 | 12672-29-6 | ND | 0.08 |
| Aroclor 1254 | 11097-69-1 | ND | 0.08 |
| Aroclor 1260 | 11096-82-5 | ND | 0.08 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | SED-11 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-04E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/28/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| Decachlorobiphenyl | 2051-24-3 | 114 | 20 - 150 |
| Tetrachloro-m-xylene | 877-09-8 | 113 | 24 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | METHOD BLANK | Date Sampled: | -- |
| Lab Number: | 9407189-05A | Date Received: | -- |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/28/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Organochlorine Pesticides | | | |
| Aldrin | 309-00-2 | ND | 0.003 |
| alpha-BHC | 319-84-6 | ND | 0.003 |
| beta-BHC | 319-85-7 | ND | 0.003 |
| Chlordane | 57-74-9 | ND | 0.02 |
| 4,4'-DDD | 72-54-8 | ND | 0.003 |
| 4,4'-DDE | 72-55-9 | ND | 0.003 |
| 4,4'-DDT | 50-29-3 | ND | 0.003 |
| delta-BHC | 319-86-8 | ND | 0.003 |
| Dieldrin | 60-57-1 | ND | 0.003 |
| Endosulfan I | 959-98-8 | ND | 0.003 |
| Endosulfan II | 33212-65-9 | ND | 0.003 |
| Endosulfan sulfate | 1031-07-8 | ND | 0.003 |
| Endrin | 72-20-8 | ND | 0.003 |
| Endrin aldehyde | 7421-93-4 | ND | 0.003 |
| gamma-BHC (Lindane) | 58-89-9 | ND | 0.003 |
| Heptachlor | 76-44-8 | ND | 0.003 |
| Heptachlor epoxide | 1024-57-3 | ND | 0.003 |
| Methoxychlor | 72-43-5 | ND | 0.02 |
| Toxaphene | 8001-35-2 | ND | 0.2 |
| Polychlorinated Biphenyls (PCB's) | | | |
| Aroclor 1016 | 12674-11-2 | ND | 0.1 |
| Aroclor 1221 | 1104-28-2 | ND | 0.1 |
| Aroclor 1232 | 11141-16-5 | ND | 0.08 |
| Aroclor 1242 | 53469-21-9 | ND | 0.08 |
| Aroclor 1248 | 12672-29-6 | ND | 0.08 |
| Aroclor 1254 | 11097-69-1 | ND | 0.08 |
| Aroclor 1260 | 11096-82-5 | ND | 0.08 |

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | METHOD BLANK | Date Sampled: | -- |
| Lab Number: | 9407189-05A | Date Received: | -- |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/27/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/28/94 |
| Method Reference: | EPA 8080 | Analyst: | TJO |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| Decachlorobiphenyl | 2051-24-3 | 111 | 20 - 150 |
| Tetrachloro-m-xylene | 877-09-8 | 115 | 24 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | SED-8 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-01E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/21/94 |
| Extraction Method: | EPA 8150 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8150 | Analyst: | DTT |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Chlorinated Herbicides | | | |
| Dalapon | 75-99-0 | ND | 1 |
| Dicamba | 1918-00-9 | ND | 0.04 |
| 2,4-Dichlorophenoxyacetic acid | 94-75-7 | ND | 0.2 |
| 4-[2,4-Dichlorophenoxyl] butyric acid | 94-82-6 | ND | 0.2 |
| Dichloroprop | 120-36-5 | ND | 0.1 |
| Dinoseb | 88-85-7 | ND | 0.01 |
| MCPA | 94-74-6 | ND | 20 |
| MCPP | 7085-19-0 | ND | 20 |
| (2,4,5-Trichlorophenoxy) acetic acid | 93-76-5 | ND | 0.04 |
| 2-[2,4,5-Trichlorophenoxy] propionic acid | 93-72-1 | ND | 0.02 |
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2,4-Dichlorophenylacetic acid | 19719-28-9 | 76 | 50 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | SED-9 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-02E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/21/94 |
| Extraction Method: | EPA 8150 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8150 | Analyst: | DTT |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| **Chlorinated Herbicides** | | | |
| Dalapon | 75-99-0 | ND | 1 |
| Dicamba | 1918-00-9 | ND | 0.04 |
| 2,4-Dichlorophenoxyacetic acid | 94-75-7 | ND | 0.2 |
| 4-[2,4-Dichlorophenoxyl] butyric acid | 94-82-6 | ND | 0.2 |
| Dichloroprop | 120-36-5 | ND | 0.1 |
| Dinoseb | 88-85-7 | ND | 0.01 |
| MCPA | 94-74-6 | ND | 20 |
| MCPP | 7085-19-0 | ND | 20 |
| (2,4,5-Trichlorophenoxy) acetic acid | 93-76-5 | ND | 0.04 |
| 2-[2,4,5-Trichlorophenoxy] propionic acid | 93-72-1 | ND | 0.02 |
| **Surrogates** | | **Recovery (%)** | **QC Limits (%)** |
| 2,4-Dichlorophenylacetic acid | 19719-28-9 | 97 | 50 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

# Quality Assurance Results Summary
for
Clayton Project No. 94071.89

| | |
|---|---|
| Clayton Lab Number: | 9407188-MB |
| Ext./Prep. Method: | EPA3550 |
| Date: | 07/25/94 |
| Analyst: | AMN |
| Std. Source: | G940715-01W |
| Sample Matrix/Media: | SOIL |

| | |
|---|---|
| Analytical Method: | EPA8015 |
| Instrument ID: | 02883 |
| Date: | 07/25/94 |
| Time: | 01:55 |
| Analyst: | AMN |
| Units: | MG/KG |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DIESEL | ND | 20.0 | 26.6 | 133 | 25.7 | 129 | 131 | 51 | 147 | 3.3 | 30 |

LCS = Laboratory Control Sample
ND = Not detected at or above limit of detection
LCL = Lower Control Limit
UCL = Upper Control Limit
SOR = Spike out of range due to high sample concentration.

# Quality Assurance Results Summary
for
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Clayton Lab Number: | 9407188-MB | Analytical Method: | EPA8270 |
| Ext./Prep. Method: | EPA 3550 | Instrument ID: | 07477 |
| Date: | 07/25/94 | Date: | 07/26/94 |
| Analyst: | GUD | Time: | 20:28 |
| Std. Source: | G940705-06W | Analyst: | ASC |
| Sample Matrix/Media: | SOIL | Units: | MG/KG |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (A) Phenol | ND | 2.53 | 2.27 | 90 | 2.61 | 103 | 96* | 26 | 90 | 14 | 35 |
| (B) 2-Chlorophenol | ND | 2.53 | 2.09 | 83 | 2.16 | 85 | 84 | 25 | 102 | 3.3 | 50 |
| (C) 1,4-Dichlorobenzene | ND | 1.67 | 1.35 | 81 | 1.34 | 80 | 81 | 28 | 104 | 0.7 | 27 |
| (D) N-Nitrosodipropylamine | ND | 1.67 | 1.52 | 91 | 1.60 | 96 | 93 | 41 | 126 | 5.1 | 38 |
| (E) 1,2,4-Trichlorobenzene | ND | 1.67 | 1.36 | 81 | 1.39 | 83 | 82 | 38 | 107 | 2.2 | 23 |
| (F) 4-Chloro-m-cresol | ND | 2.53 | 2.07 | 82 | 2.40 | 95 | 88 | 26 | 103 | 15 | 33 |
| (G) Acenaphthene | ND | 2.53 | 1.44 | 57 | 1.59 | 63 | 60 | 31 | 137 | 9.9 | 19 |
| (H) 4-Nitrophenol | ND | 2.53 | 1.87 | 74 | 2.03 | 80 | 77 | 11 | 114 | 8.2 | 50 |
| (I) 2,4-Dinitrotoluene | ND | 1.67 | 1.22 | 73 | 1.31 | 78 | 76 | 28 | 89 | 7.1 | 47 |
| (J) Pentachlorophenol | ND | 2.53 | 1.25 | 49 | 1.26 | 50 | 50 | 17 | 109 | 0.8 | 47 |
| (K) Pyrene | ND | 1.67 | 1.56 | 93 | 1.69 | 101 | 97 | 35 | 142 | 8.0 | 36 |

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

# Quality Assurance Results Summary
for
Clayton Project No. 94071.89

| | |
|---|---|
| Clayton Lab Number: | 9407188-08E |
| Ext./Prep. Method: | EPA8150 |
| Date: | 07/21/94 |
| Analyst: | HYT |
| Std. Source: | G940715-05W |
| Sample Matrix/Media: | SOIL |

| | |
|---|---|
| Analytical Method: | EPA8150 |
| Instrument ID: | 02933 |
| Date: | 07/26/94 |
| Time: | 22:35 |
| Analyst: | DTT |
| Units: | MG/KG |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | 0.0400 | 0.0378 | 95 | 0.0370 | 93 | 94 | 40 | 125 | 2.1 | 40 |
| 2,4-D | ND | 0.0500 | 0.0539 | 108 | 0.0546 | 109 | 109 | 40 | 125 | 1.3 | 40 |
| 2,4-DB | ND | 0.320 | 0.152 | 48 | 0.224 | 70 | 59 | 40 | 125 | 38 | 40 |
| DINOSEB | ND | 0.0800 | 0.0344 | 43 | 0.0393 | 49 | 46 | 40 | 125 | 13 | 40 |
| SILVEX | ND | 0.0400 | 0.0251 | 63 | 0.0350 | 88 | 75 | 40 | 125 | 33 | 40 |

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

# Quality Assurance Results Summary
# for
# Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Clayton Lab Number: | 9407139-08A | Analytical Method: | EPA6010 |
| Ext./Prep. Method: | EPA3050 | Instrument ID: | 03891 |
| Date: | 07/20/94 | Date: | 07/21/94 |
| Analyst: | RB | Time: | 09:04 |
| Std. Source: | VHG400660 | Analyst: | RAH |
| Sample Matrix/Media: | SOIL | Units: | MG/KG |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ANTIMONY | ND | 50.0 | 49.6 | 99 | 49.1 | 98 | 99 | 64 | 114 | 1.0 | 25 |
| ARSENIC | 1.20 | 50.0 | 52.3 | 102 | 50.8 | 99 | 101 | 80 | 110 | 2.9 | 25 |
| BARIUM | 25.2 | 50.0 | 78.1 | 106 | 77.1 | 104 | 105 | 48 | 159 | 1.3 | 25 |
| BERYLLIUM | ND | 50.0 | 49.9 | 100 | 50.1 | 100 | 100 | 83 | 113 | 0.4 | 25 |
| CADMIUM | ND | 50.0 | 51.2 | 102 | 51.0 | 102 | 102 | 80 | 111 | 0.4 | 25 |
| CHROMIUM | 21.0 | 50.0 | 71.8 | 102 | 70.6 | 99 | 100 | 74 | 124 | 1.7 | 25 |
| COBALT | 3.50 | 50.0 | 54.8 | 103 | 54.9 | 103 | 103 | 78 | 113 | 0.2 | 25 |
| COPPER | 3.90 | 50.0 | 56.0 | 104 | 52.0 | 96 | 100 | 71 | 126 | 7.4 | 25 |
| LEAD | 1.10 | 50.0 | 51.8 | 101 | 52.0 | 102 | 102 | 61 | 124 | 0.4 | 25 |
| MOLYBDENUM | ND | 50.0 | 48.9 | 98 | 49.6 | 99 | 99 | 69 | 119 | 1.4 | 25 |
| NICKEL | 19.1 | 50.0 | 71.2 | 104 | 71.1 | 104 | 104 | 68 | 125 | 0.1 | 25 |
| SELENIUM | ND | 50.0 | 49.6 | 99 | 49.1 | 98 | 99 | 63 | 117 | 1.0 | 25 |
| SILVER | ND | 50.0 | 51.3 | 103 | 49.3 | 99 | 101 | 79 | 118 | 4.0 | 25 |
| THALLIUM | ND | 50.0 | 50.9 | 102 | 51.2 | 102 | 102 | 60 | 123 | 0.6 | 25 |
| VANADIUM | 13.7 | 50.0 | 64.0 | 101 | 63.6 | 100 | 100 | 70 | 122 | 0.6 | 25 |
| ZINC | 11.8 | 50.0 | 63.8 | 104 | 62.8 | 102 | 103 | 64 | 133 | 1.6 | 25 |

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

# Quality Assurance Results Summary
for
Clayton Project No. 94071.89

| | |
|---|---|
| Clayton Lab Number: | 9407188-01F |
| Ext./Prep. Method: | EPA7471 |
| Date: | 07/21/94 |
| Analyst: | HYW |
| Std. Source: | A940502A |
| Sample Matrix/Media: | SOIL |

| | |
|---|---|
| Analytical Method: | EPA7471 |
| Instrument ID: | 05583 |
| Date: | 07/21/94 |
| Time: | 14:24 |
| Analyst: | HYW |
| Units: | mg/Kg |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MERCURY | 0.110 | 1.00 | 1.05 | 94 | 1.01 | 90 | 92 | 75 | 125 | 3.9 | 25 |

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

# Quality Assurance Results Summary
for
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Clayton Lab Number: | 9407188-08E | Analytical Method: | EPA8270 |
| Ext./Prep. Method: | EPA 3550 | Instrument ID: | 07477 |
| Date: | 07/25/94 | Date: | 07/27/94 |
| Analyst: | GUD | Time: | 14:43 |
| Std. Source: | G940705-06W | Analyst: | ASC |
| Sample Matrix/Media: | SOIL | Units: | MG/KG |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (A) Phenol | ND | 2.53 | 2.17 | 86 | 2.39 | 94 | 90 | 26 | 90 | 9.6 | 35 |
| (B) 2-Chlorophenol | ND | 2.53 | 2.04 | 81 | 2.12 | 84 | 82 | 25 | 102 | 3.8 | 50 |
| (C) 1,4-Dichlorobenzene | ND | 1.67 | 1.30 | 78 | 1.36 | 81 | 80 | 28 | 104 | 4.5 | 27 |
| (D) N-Nitrosodipropylamine | ND | 1.67 | 1.49 | 89 | 1.54 | 92 | 91 | 41 | 126 | 3.3 | 38 |
| (E) 1,2,4-Trichlorobenzene | ND | 1.67 | 1.32 | 79 | 1.37 | 82 | 81 | 38 | 107 | 3.7 | 23 |
| (F) 4-Chloro-m-cresol | ND | 2.53 | 2.30 | 91 | 2.29 | 91 | 91 | 26 | 103 | 0.4 | 33 |
| (G) Acenaphthene | ND | 2.53 | 1.51 | 60 | 1.54 | 61 | 60 | 31 | 137 | 2.0 | 19 |
| (H) 4-Nitrophenol | ND | 2.53 | 2.01 | 79 | 1.93 | 76 | 78 | 11 | 114 | 4.1 | 50 |
| (I) 2,4-Dinitrotoluene | ND | 1.67 | 1.23 | 74 | 1.26 | 75 | 75 | 28 | 89 | 2.4 | 47 |
| (J) Pentachlorophenol | ND | 2.53 | 1.06 | 42 | 1.52 | 60 | 51 | 17 | 109 | 36 | 47 |
| (K) Pyrene | ND | 1.67 | 1.62 | 97 | 1.75 | 105 | 101 | 35 | 142 | 7.7 | 36 |

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary
for
Clayton Project No. 94071.89

Clayton Lab Number: 9407204-01A
Ext./Prep. Method: EPA 3550
Date: 07/29/94
Analyst: CTS
Std. Source: G940715-01W
Sample Matrix/Media: SOIL

Analytical Method: EPA8080
Instrument ID: 07564
Date: 07/29/94
Time: 02:26
Analyst: ASC
Units: MG/KG

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDT | ND | 0.0400 | 0.0458 | 115 | 0.0485 | 121 | 118 | 23 | 134 | 5.7 | 50 |
| ALDRIN | ND | 0.0400 | 0.0391 | 98 | 0.0407 | 102 | 100 | 34 | 132 | 4.0 | 43 |
| DIELDRIN | ND | 0.0400 | 0.0464 | 116 | 0.0516 | 129 | 123 | 31 | 134 | 11 | 38 |
| ENDRIN | ND | 0.0400 | 0.0548 | 137 | 0.0554 | 139 | 138 | 42 | 139 | 1.1 | 45 |
| GAMMA-BHC (LINDANE) | ND | 0.0400 | 0.0361 | 90 | 0.0371 | 93 | 92 | 46 | 127 | 2.7 | 50 |
| HEPTACHLOR | ND | 0.0400 | 0.0406 | 102 | 0.0450 | 113 | 107 | 35 | 130 | 10 | 31 |

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

# Quality Assurance Results Summary
for
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Clayton Lab Number: | 9407239-LSC | Analytical Method: | EPA418_1 |
| Ext./Prep. Method: | EPA418_1 | Instrument ID: | TAHYD |
| Date: | 07/25/94 | Date: | 07/26/94 |
| Analyst: | HYT | Time: | 02:30 |
| Std. Source: | ERA 91025 # 1 | Analyst: | AMN |
| Sample Matrix/Media: | SOIL | Units: | MG/KG |

| Analyte | Sample Result | Spike Level | Matrix Spike Result | MS Recovery (%) | Matrix Spike Duplicate Result | MSD Recovery (%) | Average Recovery (% R) | LCL (% R) | UCL (% R) | RPD (%) | UCL (%RPD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL PETROLEUM HYDROCARBONS | ND | 2,060 | 1,680 | 82 | 1,680 | 82 | 82 | 50 | 150 | 0.0 | 25 |

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | SED-11 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-04E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/21/94 |
| Extraction Method: | EPA 8150 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8150 | Analyst: | DTT |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Chlorinated Herbicides | | | |
| Dalapon | 75-99-0 | ND | 1 |
| Dicamba | 1918-00-9 | ND | 0.04 |
| 2,4-Dichlorophenoxyacetic acid | 94-75-7 | ND | 0.2 |
| 4-[2,4-Dichlorophenoxyl] butyric acid | 94-82-6 | ND | 0.2 |
| Dichloroprop | 120-36-5 | ND | 0.1 |
| Dinoseb | 88-85-7 | ND | 0.01 |
| MCPA | 94-74-6 | ND | 20 |
| MCPP | 7085-19-0 | ND | 20 |
| (2,4,5-Trichlorophenoxy) acetic acid | 93-76-5 | ND | 0.04 |
| 2-[2,4,5-Trichlorophenoxy] propionic acid | 93-72-1 | ND | 0.02 |
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2,4-Dichlorophenylacetic acid | 19719-28-9 | 73 | 50 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | METHOD BLANK | Date Sampled: | -- |
| Lab Number: | 9407189-05A | Date Received: | -- |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/21/94 |
| Extraction Method: | EPA 8150 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8150 | Analyst: | DTT |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Chlorinated Herbicides | | | |
| Dalapon | 75-99-0 | ND | 1 |
| Dicamba | 1918-00-9 | ND | 0.04 |
| 2,4-Dichlorophenoxyacetic acid | 94-75-7 | ND | 0.2 |
| 4-[2,4-Dichlorophenoxyl] butyric acid | 94-82-6 | ND | 0.2 |
| Dichloroprop | 120-36-5 | ND | 0.1 |
| Dinoseb | 88-85-7 | ND | 0.01 |
| MCPA | 94-74-6 | ND | 20 |
| MCPP | 7085-19-0 | ND | 20 |
| (2,4,5-Trichlorophenoxy) acetic acid | 93-76-5 | ND | 0.04 |
| 2-[2,4,5-Trichlorophenoxy] propionic acid | 93-72-1 | ND | 0.02 |
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2,4-Dichlorophenylacetic acid | 19719-28-9 | 76 | 50 - 150 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | SED-8 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-01E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Polynuclear Aromatic Hydrocarbons | | | |
| Acenaphthene | 83-32-9 | ND | 0.2 |
| Acenaphthylene | 208-96-8 | ND | 0.2 |
| Anthracene | 120-12-7 | ND | 0.2 |
| Benzo(a)anthracene | 56-55-3 | ND | 0.2 |
| Benzo(a)pyrene | 50-32-8 | ND | 0.2 |
| Benzo(b)fluoranthene | 205-99-2 | ND | 0.2 |
| Benzo(ghi)perylene | 191-24-2 | ND | 0.2 |
| Benzo(k)fluoranthene | 207-08-9 | ND | 0.2 |
| Chrysene | 218-01-9 | ND | 0.2 |
| Dibenzo(a,h)anthracene | 53-70-3 | ND | 0.2 |
| Fluoranthene | 206-44-0 | ND | 0.2 |
| Fluorene | 86-73-7 | ND | 0.2 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ND | 0.2 |
| Naphthalene | 91-20-3 | ND | 0.2 |
| Phenanthrene | 85-01-8 | ND | 0.2 |
| Pyrene | 129-00-0 | ND | 0.2 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | SED-8 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-01E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2-Fluorobiphenyl | 321-60-8 | 71 | 30 - 115 |
| Nitrobenzene-d5 | 4165-60-0 | 76 | 23 - 120 |
| Terphenyl-d14 | 98904-43-9 | 77 | 18 - 137 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | SED-9 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-02E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Polynuclear Aromatic Hydrocarbons | | | |
| Acenaphthene | 83-32-9 | ND | 0.2 |
| Acenaphthylene | 208-96-8 | ND | 0.2 |
| Anthracene | 120-12-7 | ND | 0.2 |
| Benzo(a)anthracene | 56-55-3 | ND | 0.2 |
| Benzo(a)pyrene | 50-32-8 | ND | 0.2 |
| Benzo(b)fluoranthene | 205-99-2 | ND | 0.2 |
| Benzo(ghi)perylene | 191-24-2 | ND | 0.2 |
| Benzo(k)fluoranthene | 207-08-9 | ND | 0.2 |
| Chrysene | 218-01-9 | ND | 0.2 |
| Dibenzo(a,h)anthracene | 53-70-3 | ND | 0.2 |
| Fluoranthene | 206-44-0 | ND | 0.2 |
| Fluorene | 86-73-7 | ND | 0.2 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ND | 0.2 |
| Naphthalene | 91-20-3 | ND | 0.2 |
| Phenanthrene | 85-01-8 | ND | 0.2 |
| Pyrene | 129-00-0 | ND | 0.2 |

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | SED-9 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-02E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2-Fluorobiphenyl | 321-60-8 | 75 | 30 - 115 |
| Nitrobenzene-d5 | 4165-60-0 | 83 | 23 - 120 |
| Terphenyl-d14 | 98904-43-9 | 83 | 18 - 137 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | SED-11 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-04E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Polynuclear Aromatic Hydrocarbons | | | |
| Acenaphthene | 83-32-9 | ND | 0.2 |
| Acenaphthylene | 208-96-8 | ND | 0.2 |
| Anthracene | 120-12-7 | ND | 0.2 |
| Benzo(a)anthracene | 56-55-3 | ND | 0.2 |
| Benzo(a)pyrene | 50-32-8 | ND | 0.2 |
| Benzo(b)fluoranthene | 205-99-2 | ND | 0.2 |
| Benzo(ghi)perylene | 191-24-2 | ND | 0.2 |
| Benzo(k)fluoranthene | 207-08-9 | ND | 0.2 |
| Chrysene | 218-01-9 | ND | 0.2 |
| Dibenzo(a,h)anthracene | 53-70-3 | ND | 0.2 |
| Fluoranthene | 206-44-0 | ND | 0.2 |
| Fluorene | 86-73-7 | ND | 0.2 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ND | 0.2 |
| Naphthalene | 91-20-3 | ND | 0.2 |
| Phenanthrene | 85-01-8 | ND | 0.2 |
| Pyrene | 129-00-0 | ND | 0.2 |

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

|  |  |  |  |
|---|---|---|---|
| Sample Identification: | SED-11 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407189-04E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates |  | Recovery (%) | QC Limits (%) |
| 2-Fluorobiphenyl | 321-60-8 | 69 | 30 - 115 |
| Nitrobenzene-d5 | 4165-60-0 | 77 | 23 - 120 |
| Terphenyl-d14 | 98904-43-9 | 77 | 18 - 137 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | METHOD BLANK | Date Sampled: | -- |
| Lab Number: | 9407189-05A | Date Received: | -- |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Polynuclear Aromatic Hydrocarbons | | | |
| Acenaphthene | 83-32-9 | ND | 0.2 |
| Acenaphthylene | 208-96-8 | ND | 0.2 |
| Anthracene | 120-12-7 | ND | 0.2 |
| Benzo(a)anthracene | 56-55-3 | ND | 0.2 |
| Benzo(a)pyrene | 50-32-8 | ND | 0.2 |
| Benzo(b)fluoranthene | 205-99-2 | ND | 0.2 |
| Benzo(ghi)perylene | 191-24-2 | ND | 0.2 |
| Benzo(k)fluoranthene | 207-08-9 | ND | 0.2 |
| Chrysene | 218-01-9 | ND | 0.2 |
| Dibenzo(a,h)anthracene | 53-70-3 | ND | 0.2 |
| Fluoranthene | 206-44-0 | ND | 0.2 |
| Fluorene | 86-73-7 | ND | 0.2 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ND | 0.2 |
| Naphthalene | 91-20-3 | ND | 0.2 |
| Phenanthrene | 85-01-8 | ND | 0.2 |
| Pyrene | 129-00-0 | ND | 0.2 |

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | METHOD BLANK | Date Sampled: | -- |
| Lab Number: | 9407189-05A | Date Received: | -- |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/25/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 07/26/94 |
| Method Reference: | EPA 8270 | Analyst: | ASC |

| Analyte | CAS # | Concentration (mg/kg) | Method Detection Limit (mg/kg) |
|---|---|---|---|
| Surrogates | | Recovery (%) | QC Limits (%) |
| 2-Fluorobiphenyl | 321-60-8 | 77 | 30 - 115 |
| Nitrobenzene-d5 | 4165-60-0 | 84 | 23 - 120 |
| Terphenyl-d14 | 98904-43-9 | 86 | 18 - 137 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet weight basis, as received

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

Sample Identification: SED-8
Lab Number: 9407189-01
Sample Matrix/Media: SOIL

Date Sampled: 07/14/94
Date Received: 07/15/94

| Analyte | Concentration | Method Detection Limit | Units | Date Prepared | Date Analyzed | Prep Method | Method Reference |
|---|---|---|---|---|---|---|---|
| Antimony | 3 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Arsenic | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Barium | 82 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Beryllium | 0.3 | 0.1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cadmium | <0.5 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Chromium | 99 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cobalt | 19 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Copper | 41 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Lead | 6 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Mercury | <0.1 | 0.1 | mg/kg | 07/21/94 | 07/21/94 | EPA 7471 | EPA 7471 |
| Molybdenum | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Nickel | 96 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Selenium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Silver | 1.1 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| TPH-D | 24 a | 1 | mg/kg | 07/22/94 | 07/24/94 | EPA 3550 | EPA 8015* |
| TRPH | ND | 30 | mg/kg | 07/25/94 | 07/26/94 | EPA 9071 | EPA 9073 |
| Thallium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Vanadium | 75 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Zinc | 69 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-D = Extractable petroleum hydrocarbons from C10 to C42 quantitated as diesel.
* = Modified
TRPH = Total Recoverable Petroleum Hydrocarbons
a Sample does not match the typical diesel pattern.
Sample appears to be oil.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

Sample Identification: SED-9
Lab Number: 9407189-02
Sample Matrix/Media: SOIL

Date Sampled: 07/14/94
Date Received: 07/15/94

| Analyte | Concentration | Method Detection Limit | Units | Date Prepared | Date Analyzed | Prep Method | Method Reference |
|---|---|---|---|---|---|---|---|
| Antimony | 2 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Arsenic | 1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Barium | 100 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Beryllium | 0.3 | 0.1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cadmium | <0.5 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Chromium | 120 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cobalt | 23 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Copper | 49 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Lead | 8 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Mercury | <0.1 | 0.1 | mg/kg | 07/21/94 | 07/21/94 | EPA 7471 | EPA 7471 |
| Molybdenum | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Nickel | 100 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Selenium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Silver | 1.0 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| TPH-D | 22 a | 1 | mg/kg | 07/22/94 | 07/24/94 | EPA 3550 | EPA 8015* |
| TRPH | 100 | 30 | mg/kg | 07/25/94 | 07/26/94 | EPA 9071 | EPA 9073 |
| Thallium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Vanadium | 86 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Zinc | 69 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-D = Extractable petroleum hydrocarbons from C10 to C42 quantitated as diesel.
* = Modified
TRPH = Total Recoverable Petroleum Hydrocarbons
a Sample does not match the typical diesel pattern.
Sample appears to be oil.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

Sample Identification: SED-11
Lab Number: 9407189-04
Sample Matrix/Media: SOIL

Date Sampled: 07/14/94
Date Received: 07/15/94

| Analyte | Concentration | Method Detection Limit | Units | Date Prepared | Date Analyzed | Prep Method | Method Reference |
|---|---|---|---|---|---|---|---|
| Antimony | 2 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Arsenic | 2 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Barium | 97 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Beryllium | 0.4 | 0.1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cadmium | <0.5 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Chromium | 140 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cobalt | 23 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Copper | 49 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Lead | 14 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Mercury | <0.1 | 0.1 | mg/kg | 07/21/94 | 07/21/94 | EPA 7471 | EPA 7471 |
| Molybdenum | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Nickel | 110 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Selenium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Silver | 0.8 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| TPH-D | 15 a | 1 | mg/kg | 07/22/94 | 07/24/94 | EPA 3550 | EPA 8015* |
| TRPH | 50 | 30 | mg/kg | 07/25/94 | 07/26/94 | EPA 9071 | EPA 9073 |
| Thallium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Vanadium | 100 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Zinc | 68 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-D = Extractable petroleum hydrocarbons from C10 to C42 quantitated as diesel.
* = Modified
TRPH = Total Recoverable Petroleum Hydrocarbons
a Sample does not match the typical diesel pattern.
Sample appears to be oil.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.89

| | | | |
|---|---|---|---|
| Sample Identification: | METHOD BLANK | Date Sampled: | -- |
| Lab Number: | 9407189-05 | Date Received: | -- |
| Sample Matrix/Media: | SOIL | | |

| Analyte | Concentration | Method Detection Limit | Units | Date Prepared | Date Analyzed | Prep Method | Method Reference |
|---|---|---|---|---|---|---|---|
| Antimony | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Arsenic | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Barium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Beryllium | <0.1 | 0.1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cadmium | <0.5 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Chromium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Cobalt | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Copper | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Lead | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| rcury | <0.1 | 0.1 | mg/kg | 07/21/94 | 07/21/94 | EPA 7471 | EPA 7471 |
| lybdenum | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Nickel | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Selenium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Silver | <0.5 | 0.5 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| TPH-D | ND | 1 | mg/kg | 07/22/94 | 07/24/94 | EPA 3550 | EPA 8015* |
| TRPH | ND | 30 | mg/kg | 07/25/94 | 07/26/94 | EPA 9071 | EPA 9073 |
| Thallium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Vanadium | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |
| Zinc | <1 | 1 | mg/kg | 07/20/94 | 07/21/94 | EPA 3050 | EPA 6010 |

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-D = Extractable petroleum hydrocarbons from C10 to C42 quantitated as diesel.
* = Modified
TRPH = Total Recoverable Petroleum Hydrocarbons

# CHAIN OF CUSTODY

pg 1/2

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118
(408) 265-2600

FC 1019 (07-23-90)

Site Name: ADOBE CREEK
Incident ID#:
Scope Number: 2-1010-101-458
LABORATORY: Clayton
Sampled by (Print): Mary Bannister - Terratech
Requested By: Presley
Site Location: ADOBE SEDIMENTS

(9407188 + 9407189)

| Sample ID# | Date Sampled | Time Sampled | Matrix | No. of Samples | Turn Around Time | Analyses Requested → | ~~EPA 824~~ 8080 | ~~EPA 825~~ 8150 | 8100 PAH | Title 26 metals | TPH d | 418.1 | | Preservation | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SED 1 | 7·14·94 | 10:00 AM | S | 4·B<br>1·J | NR | | X | X | X | X | X | X | 9407188 | (01)(A-F) | Use contents |
| SED-2 | | 10:15 AM | | | | | | | | | | | | -02 | of glass jars |
| SED-3 | | 11:00 AM | | | | | | | | | | | | -03 | for all metal |
| NAT-3 | | 11:10 AM | | | | | | | | | | | | -04 | analyses, brass |
| SED4 | | 9:40 AM | | | | | | | | | | | | -05 | liners for others |
| SED-5 | | 12:00 | | | | | | | | | | | | -06 | |
| SED-6 | | 12:00 | | | | | | | | | | | | -07 | Composite 4 brass |
| SED-7 | | 12:30 | | | | | | | | | | | | -08 | liners for all analyses |
| SED-8 | | 12:30 | | | | | | | | | | | 9407189 | (01) | besides metals. |
| SED-9 | | 1:00 | | | | | | | | | | X | | (02) | (jar was field composited) |

MATRIX ABBREVIATION - Soil = S; Water = W; Product = P

(2x6 BC - A→D Comp. to CREATE = E
500ml GLASS JAR - F

***Laboratory shall sign upon receipt and return a copy of this form with laboratory results.***

| Relinquished By (Signatures)/Affiliation: | Received By (Signatures)/Affiliation: | Date | Time |
|---|---|---|---|
| ① Mary Bannister Terratech | ② Peter Shepley / SCUWD | 7/14/94 | 3:05 pm |
| Peter Shepley ③ | ④ REFRIGERATOR | 7/14/94 | 4:10 pm |
| SCUWD William Springer ⑤ | ⑥ 631 AERO | 7-15-94 | 9:00 am |
| ⑦ DBL | ⑧ Tracey B. Bulle - Clayton | 7-15-94 | 10:50 Am |

Distribution: Original - RETURN TO DISTRICT WITH RESULTS, Pink - Laboratory, Yellow - District

Page 1 of 2

DID NOT RECEIVE

# CHAIN OF CUSTODY

PS 2/2

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118
(408) 265-2600

FC 1019 (07-23-90)

Site Name: ADOBE CREEK
LABORATORY: CLAYTON
Incident ID#:
Sampled by (Print): MARY BANNISTER TERRATECH
Scope Number: 2-1010-101-458
Requested By: PRESLEY
Site Location: ADOBE SEDIMENT

(9407188 + 9407189)

| Sample ID# | Date Sampled | Time Sampled | Matrix | No. of Samples | Turn Around Time | Analyses Requested → | EPA ~~624~~ 8080 | EPA ~~625~~ 8150 | 8100 PAH | TITLE 26 METALS | TPH d | 418.1 | | | Preservation | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SED-10 | 7-14-94 | 1:30 | S | 4+1 J | NOR | | X | X | X | X | X | X | 9407189 | | (A-F 03) | USE CONTENTS OF * |
| SED-11 | ↓ | 2:30 | ↓ | ↓ | ↓ | | X | X | X | X | X | X | | ↓ | (04) | GLASS JARS FOR METALS |
| | | | | | | | | | | | | | | | | BRASS LINERS FOR |
| | | | | | | | | | | | | | | | | OTHERS (PLEASE COMPOSITE |
| | | | | | | | | | | | | | | | | 4 LINERS IN EA SET) |
| | | | | | | | | | | | | | | | | ~~Composite 4 b~~ |
| | | | | | | | | | | | | | | | | (jar was composited |
| | | | | | | | | | | | | | | | | in the field |
| | | | | | | | | | | | | | ~~F~~ | | (2×6 | BC A→D Comp. to ~~CREATE~~ = E |
| | | | | | | | | | | | | | | | glass | 500mL JAR - F |

MATRIX ABBREVIATION - Soil = S; Water = W; Product = P

***Laboratory shall sign upon receipt and return a copy of this form with laboratory results.***

| Relinquished By (Signatures)/Affiliation: | Received By (Signatures)/Affiliation: | Date | Time |
|---|---|---|---|
| Mary Bannister Terratech ① | ② Pete Snyder / SCVWD | 7/14/94 | 3:05 pm. |
| Pete Snyder ③ | ④ REFRIGERATOR | 7/14/94 | 4:10 pm. |
| SCVWD - Nathan Springer ⑤ | ⑥ 631 AERO | 7-15-94 | 9:00 am |
| ⑦ | ⑧ Craig / Clayton | 7-15-94 | 10:50 Am |

Distribution: Original - RETURN TO DISTRICT WITH RESULTS, Pink - Laboratory, Yellow - District

Page 2 of 2

*- DID NOT RECEIVE

# Quality Assurance Results Summary

## Matrix Spike/Matrix Spike Duplicate Results

for

Clayton Project No. 94071.89

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

September 12, 1994

Ms. Charleen Renati
SANTA CLARA VALLEY WATER DISTRICT
5750 Almaden Expressway
San Jose, CA 95118

ADDITIONAL REPORT
Client Ref.: 94-39/Adobe Creek
Clayton Project No.: 94071.88

Dear Ms. Renati:

Attached is our additional analytical laboratory report for the samples received on July 15, 1994 and originally reported on August 2, 1994. As requested, Sample SED-1 was analyzed by gas chromatograph/mass spectrometry in attempt to determine the compounds detected by TPH-Diesel analysis. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Suzanne Silvera, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
Western Operations

HAH/tjb

Attachments

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | SED-1 | Date Sampled: | 07/14/94 |
| Lab Number: | 9407188-01E | Date Received: | 07/15/94 |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/26/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 09/08/94 |
| Method Reference: | EPA 8270 | | |

| Retention Time | Tentatively Identified Compounds | CAS # | Estimated * Concentration (mg/kg) | Library Match Prob. |
|---|---|---|---|---|
| 7.82 | alpha Pinene | 80-56-8 | | 87 |
| 9.10 | 2-methyl-5-Bicyclohex-2-ene | 2867-05-2 | | 64 |
| 9.40 | 1-methyl-2-(1-methylethyl)-Benzene | 527-84-4 | | 91 |
| 9.48 | beta Phellandrene | 555-10-2 | | 91 |
| 9.52 | Alkyl cyclopentene + Cineole | 470-82-6 | | 80 |
| 14.28 | Terpene | | | |
| 15.20 | Patchoulene | 1405-16-9 | | 93 |
| 15.66 | decahydro-1H-Cycloprop[e] Azulene | 25246-27-9 | | 94 |
| 15.89 | similar to 15.66 | | | |
| 16.23 | similar to 15.66 | | | |
| 16.30 | similar to 15.66 | | | |
| 16.58 | hexahydro Naphthalene | 523-47-7 | | 93 |
| 17.10 | Ledol | 577-27-5 | | 45 |
| 17.43 | similar to 15.66 | | | |
| 17.52 | Unknown | | | |
| 17.83 | alkyl Cyclohexane | | | |
| 18.15 | Unknown | | | |

--: Information not available or not applicable

* Estimated concentration based on peak area response of nearest internal standard.

Tentative identification based on nearest match to NBS Library.

Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | | |
|---|---|---|---|---|
| Sample Identification: | METHOD BLANK | | Date Sampled: | -- |
| Lab Number: | 9407188-09B | | Date Received: | -- |
| Sample Matrix/Media: | SOIL | | Date Extracted: | 07/26/94 |
| Extraction Method: | EPA 3550 | | Date Analyzed: | 09/08/94 |
| Method Reference: | EPA 8270 | | | |

| Retention Time | Tentatively Identified Compounds | CAS # | Estimated * Concentration (mg/kg) | Library Match Prob. |
|---|---|---|---|---|
| | None detected | | | |

--: Information not available or not applicable

* Estimated concentration based on peak area response of nearest internal standard.
Tentative identification based on nearest match to NBS Library.

**Western Operations**

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

**Clayton**
ENVIRONMENTAL
CONSULTANTS

September 19, 1994

Ms. Charleen Renati
SANTA CLARA VALLEY WATER DISTRICT
5750 Almaden Expressway
San Jose, CA 95118

ADDITIONAL REPORT
Client Ref.: 94-39/Adobe Creek
Clayton Project No.: 94071.88

Dear Ms. Renati:

Attached is our additional analytical laboratory report for the samples received on July 15, 1994 and originally reported on August 2, 1994. As requested, Samples SED-2 and SED-3 were analyzed by gas chromatograph/mass spectrometry in attempt to determine the compounds detected by TPH-Diesel analysis. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Suzanne Silvera, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Michael Lynch for

Harriotte A. Hurley, CIH
Director, Laboratory Services
Western Operations

HAH/tjb

Attachments

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

Sample Identification: SED-2
Lab Number: 9407188-02E
Sample Matrix/Media: SOIL
Extraction Method: EPA 3550
Method Reference: EPA 8270

Date Sampled: 07/14/94
Date Received: 07/15/94
Date Extracted: 07/26/94
Date Analyzed: 09/13/94

| Retention Time | Tentatively Identified Compounds | CAS # | Estimated * Concentration (mg/kg) | Library Match Prob. |
|---|---|---|---|---|
| 8.56 | alpha-Pinene | 80-56-8 | | 72 |
| 8.92 | 1-methyl-2-(1-methylethyl) Benzene | 527-84-4 | | 91 |
| 14.62 | Patchoulene | 1405-16-9 | | 80 |
| 15.02 | alkyl octahydro-Naphthalene | 10219-75-7 | | 74 |
| 15.30 | similar to 15.02 | | | |
| 15.71 | similar to 15.02 | | | |
| 15.88 | unknown | | | |
| 16.03 | tetrahydro-Naphthalene | 483-77-2 | | 93 |
| 16.82 | unknown | | | |
| 26.50 | decahydro-pentamethyl-Phenanthrenone | 7715-44-8 | | 60 |

--: Information not available or not applicable

* Estimated concentration based on peak area response of nearest internal standard.
Tentative identification based on nearest match to NBS Library.

## Analytical Results
## for
## Santa Clara Valley Water District
## Client Reference: 94-39/Adobe Creek
## Clayton Project No. 94071.88

Sample Identification: SED-3
Lab Number: 9407188-03E
Sample Matrix/Media: SOIL
Extraction Method: EPA 3550
Method Reference: EPA 8270

Date Sampled: 07/14/94
Date Received: 07/15/94
Date Extracted: 07/26/94
Date Analyzed: 09/13/94

| Retention Time | Tentatively Identified Compounds | CAS # | Estimated * Concentration (mg/kg) | Library Match Prob. |
|---|---|---|---|---|
| 7.32 | similar to 8.57 | | | |
| 8.57 | alpha-Pinene | 80-56-8 | | 94 |
| 9.01 | Cineole | 470-82-6 | | 53 |
| 10.87 | Camphor | 76-22-2 | | 96 |
| 15.02 | alkyl octahydro-Naphthalene | 10219-75-7 | | 80 |
| 15.31 | Caryophyllene | 87-44-5 | | 80 |
| 15.72 | similar to 15.31 | | | |
| 16.82 | Ledol | 577-27-5 | | 32 |
| 22.42 | Pyrene | 129-00-0 | | 90 |
| 25.68 | Bis(2-ethylhexyl) phthalate | 117-81-7 | | 91 |

--: Information not available or not applicable

* Estimated concentration based on peak area response of nearest internal standard.

Tentative identification based on nearest match to NBS Library.

# Analytical Results
for
Santa Clara Valley Water District
Client Reference: 94-39/Adobe Creek
Clayton Project No. 94071.88

| | | | |
|---|---|---|---|
| Sample Identification: | METHOD BLANK | Date Sampled: | -- |
| Lab Number: | 9407188-09B | Date Received: | -- |
| Sample Matrix/Media: | SOIL | Date Extracted: | 07/26/94 |
| Extraction Method: | EPA 3550 | Date Analyzed: | 09/13/94 |
| Method Reference: | EPA 8270 | | |

| Retention Time | Tentatively Identified Compounds | CAS # | Estimated * Concentration (mg/kg) | Library Match Prob. |
|---|---|---|---|---|
| | None detected | | | |

--: Information not available or not applicable

* Estimated concentration based on peak area response of nearest internal standard.
Tentative identification based on nearest match to NBS Library.

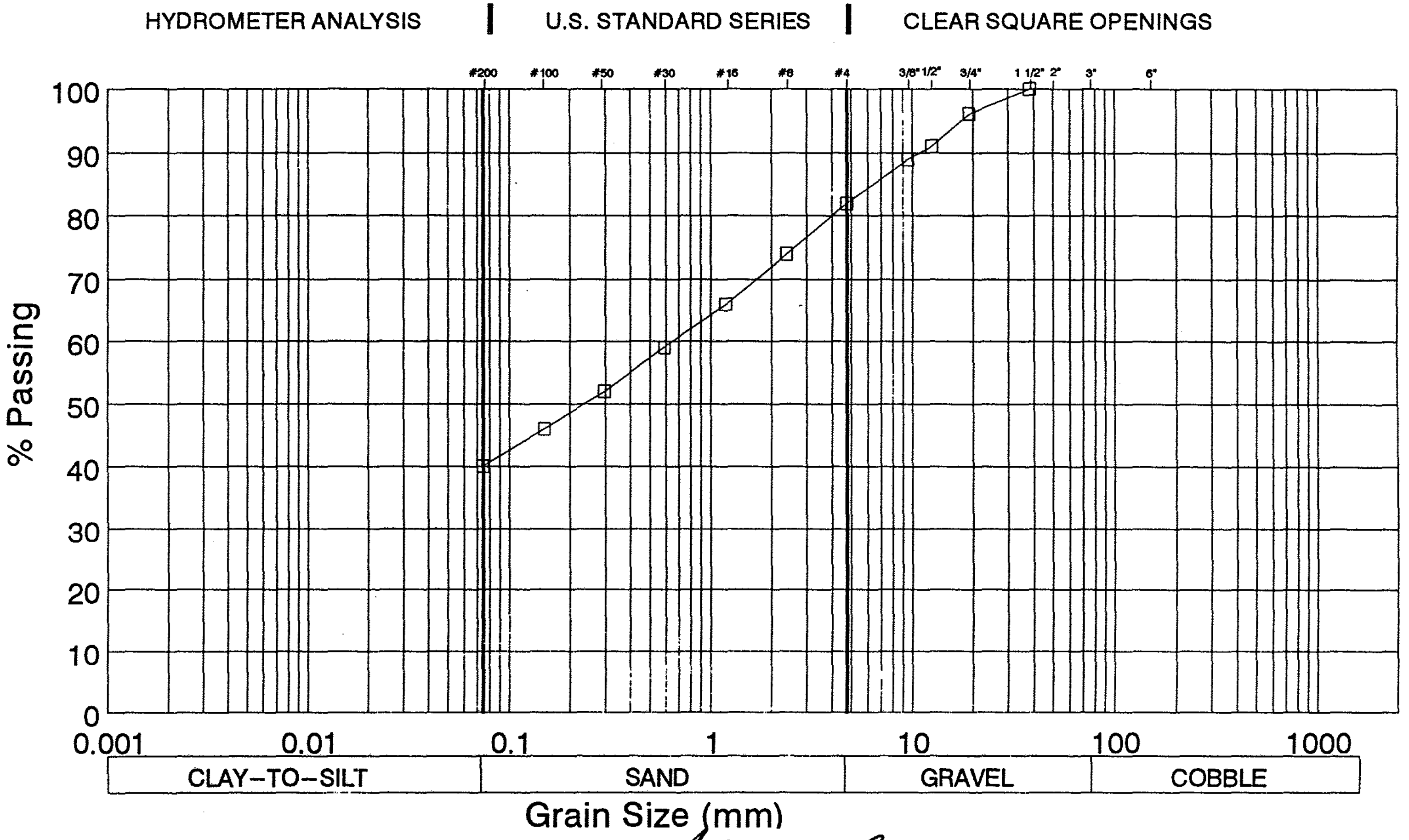
# APPENDIX B

## Grain Size Distribution Curves and Laboratory Data

TERRATECH, INC.

| Terratech, Inc. | GRAIN SIZE DISTRIBUTION | (408) 372-3716 |
|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Project: | Adobe Creek Sedimentation | | | Date: | 07/28/94 |
| Client: | Santa Clara Valley Water District | | | Project #: | 5499/1 |
| Sample #: | NAT-3 | Depth: | 0.0' | Lab #: | 2230 |
| Material Description: | CLAYEY SAND WITH GRAVEL; brown (SC) | | | Date Tested: | 07/26/94 |

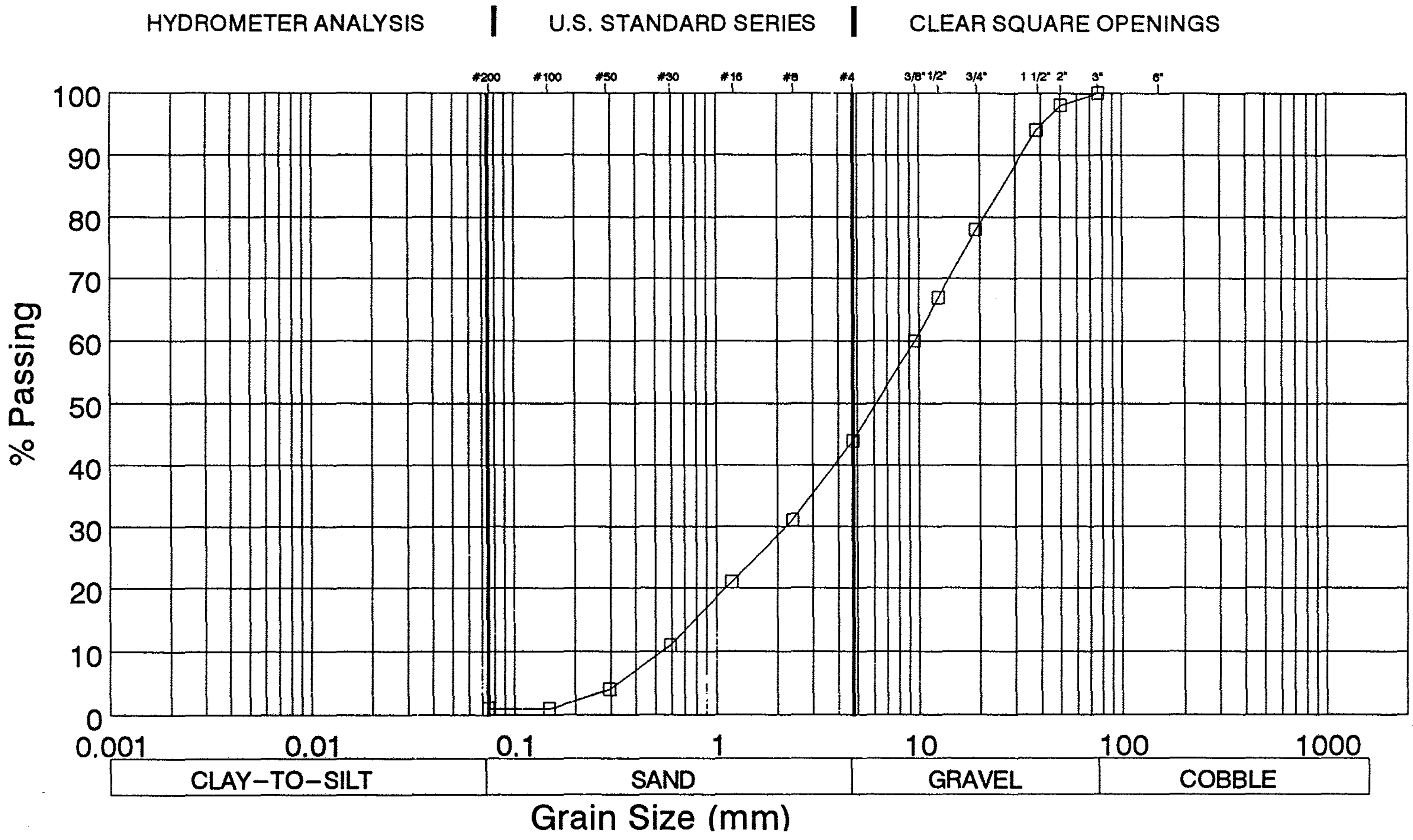


PDD:clg

| | |
|---|---|
| Report By: | Prav Dayah, Lab Director, CET 084135 |

| Terratech, Inc. | GRAIN SIZE DISTRIBUTION | (408) 372-3716 |
|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Project: | Adobe Creek Sedimentation | | | Date: | 07/28/94 |
| Client: | Santa Clara Valley Water District | | | Project #: | 5499/1 |
| Sample #: | SED-4 | Depth: | 0.0' | Lab #: | 2230 |
| Material Description: | WELL GRADED GRAVEL WITH SAND; brown (GW) | | | Date Tested: | 07/26/94 |

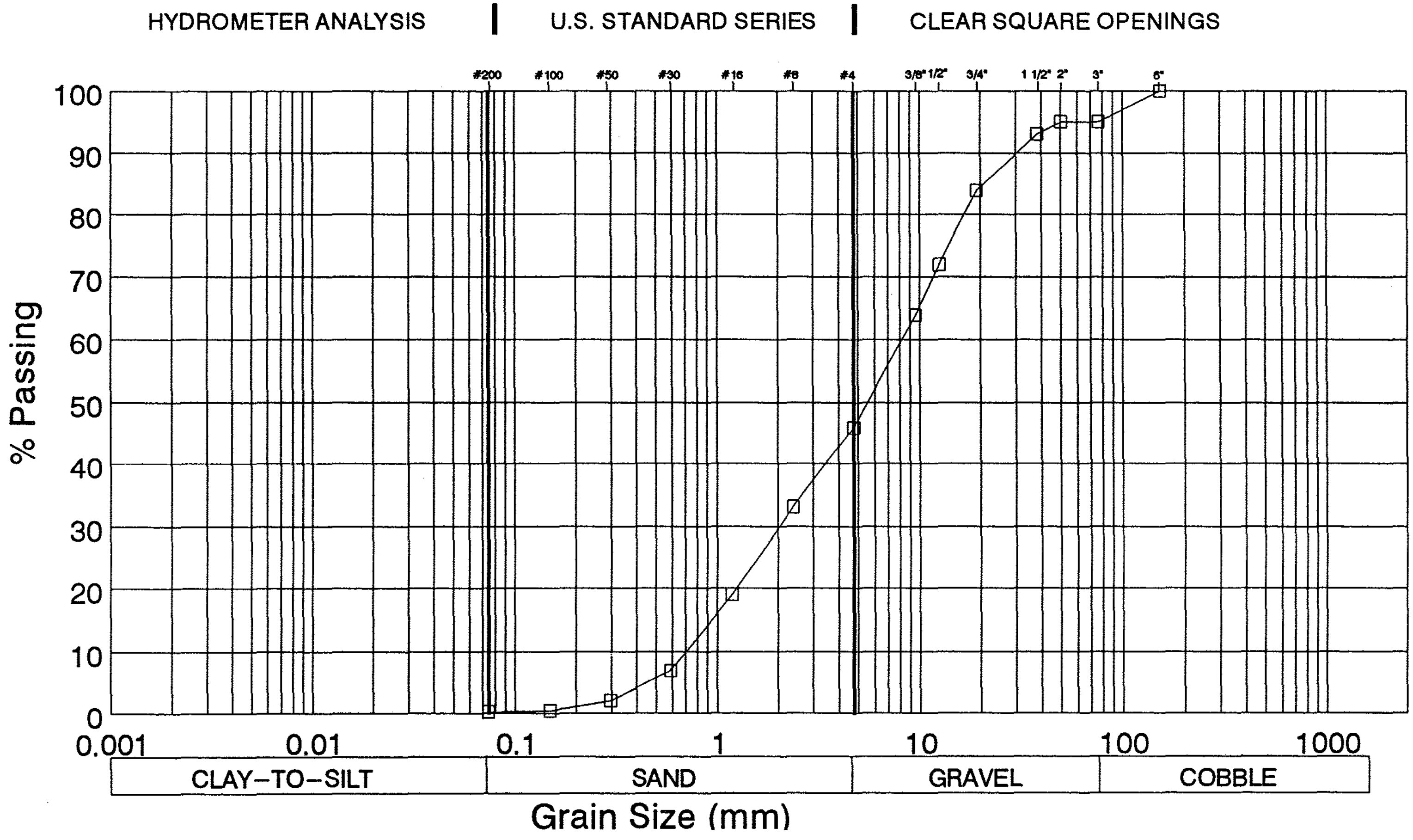


PDD:clg

| | |
|---|---|
| Report By: | Prav Dayah, Lab Director, CET 084135 |

| Terratech, Inc. | GRAIN SIZE DISTRIBUTION | (408) 372-3716 |
|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Project: | Adobe Creek Sedimentation | | | Date: | 07/28/94 |
| Client: | Santa Clara Valley Water District | | | Project #: | 5499/1 |
| Sample #: | SED-5 | Depth: | 0.0' | Lab #: | 2230 |
| Material Description: | WELL GRADED GRAVEL WITH SAND; brown (GW) | | | Date Tested: | 07/26/94 |



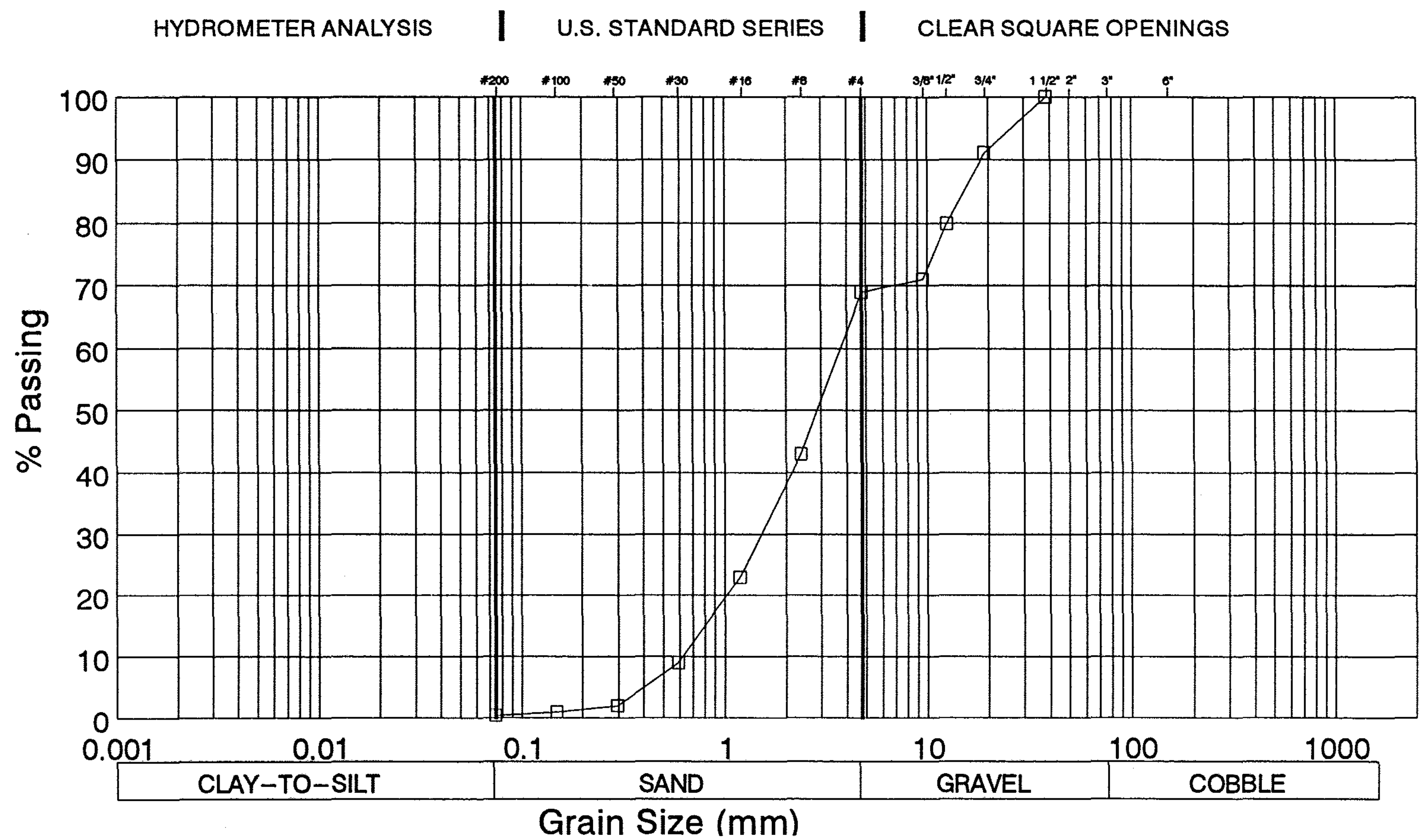
PDD:clg

| | |
|---|---|
| Report By: | Prav Dayah, Lab Director, CET 084135 |

TERRATECH, INC.

| | | |
|---|---|---|
| Terratech, Inc. | **GRAIN SIZE DISTRIBUTION** | (408) 372-3716 |

| | | | | | |
|---|---|---|---|---|---|
| Project: | Adobe Creek Sedimentation | | | Date: | 07/28/94 |
| Client: | Santa Clara Valley Water District | | | Project #: | 5499/1 |
| Sample #: | SED-7 | Depth: | 0.0' | Lab #: | 2230 |
| Material Description: | POORLY GRADED SAND WITH GRAVEL; brown (SP) | | | Date Tested: | 07/26/94 |

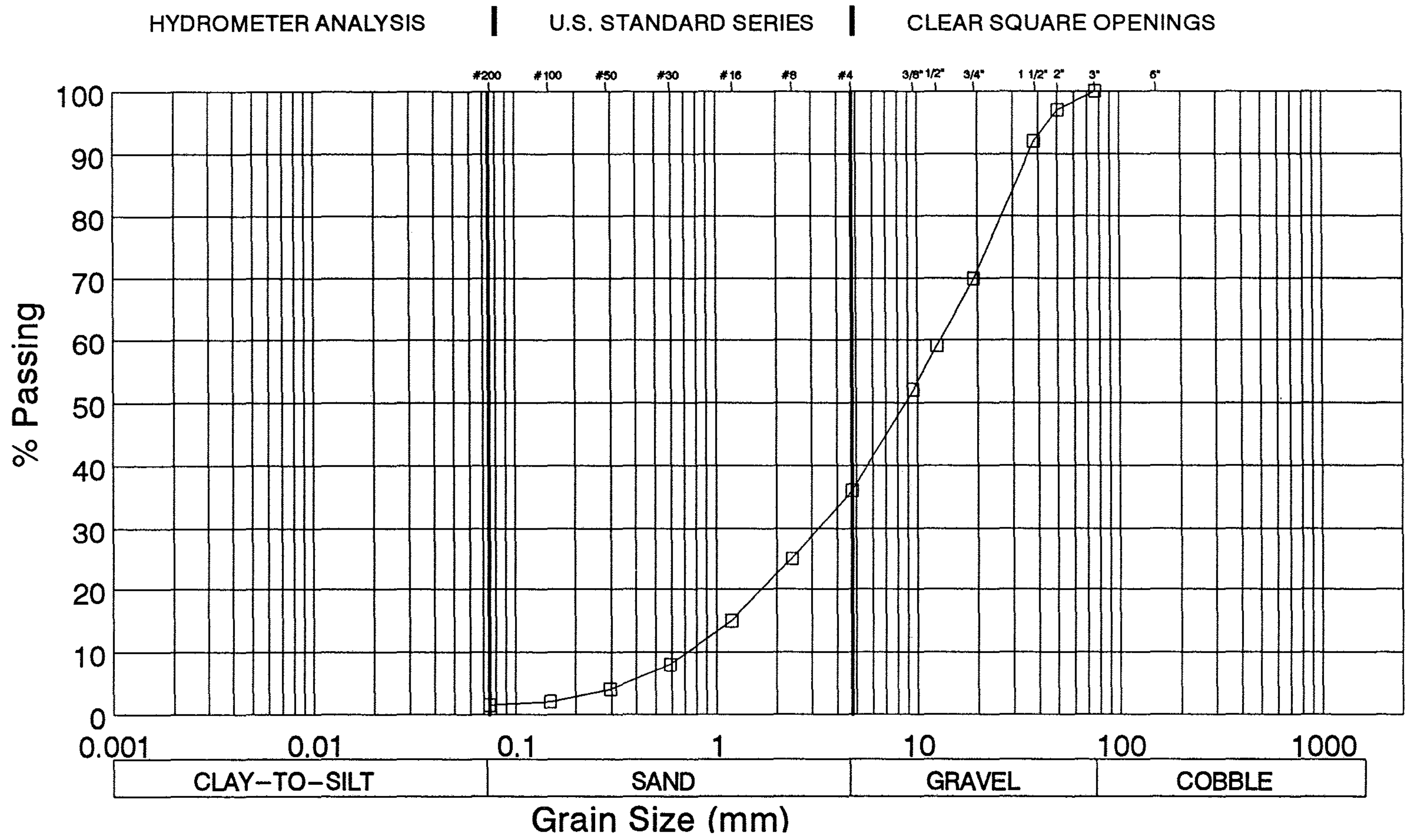


PDD:clg

| | |
|---|---|
| Report By: | Prav Dayah, Lab Director, CET 084135 |

| | | |
|---|---|---|
| Terratech, Inc. | **GRAIN SIZE DISTRIBUTION** | (408) 372-3716 |

| | | | | | |
|---|---|---|---|---|---|
| Project: | Adobe Creek Sedimentation | | | Date: | 07/28/94 |
| Client: | Santa Clara Valley Water District | | | Project #: | 5499/1 |
| Sample #: | SED-8 | Depth: | 0.0' | Lab #: | 2230 |
| Material Description: | WELL GRADED SAND WITH GRAVEL; brown (GW) | | | Date Tested: | 07/27/94 |



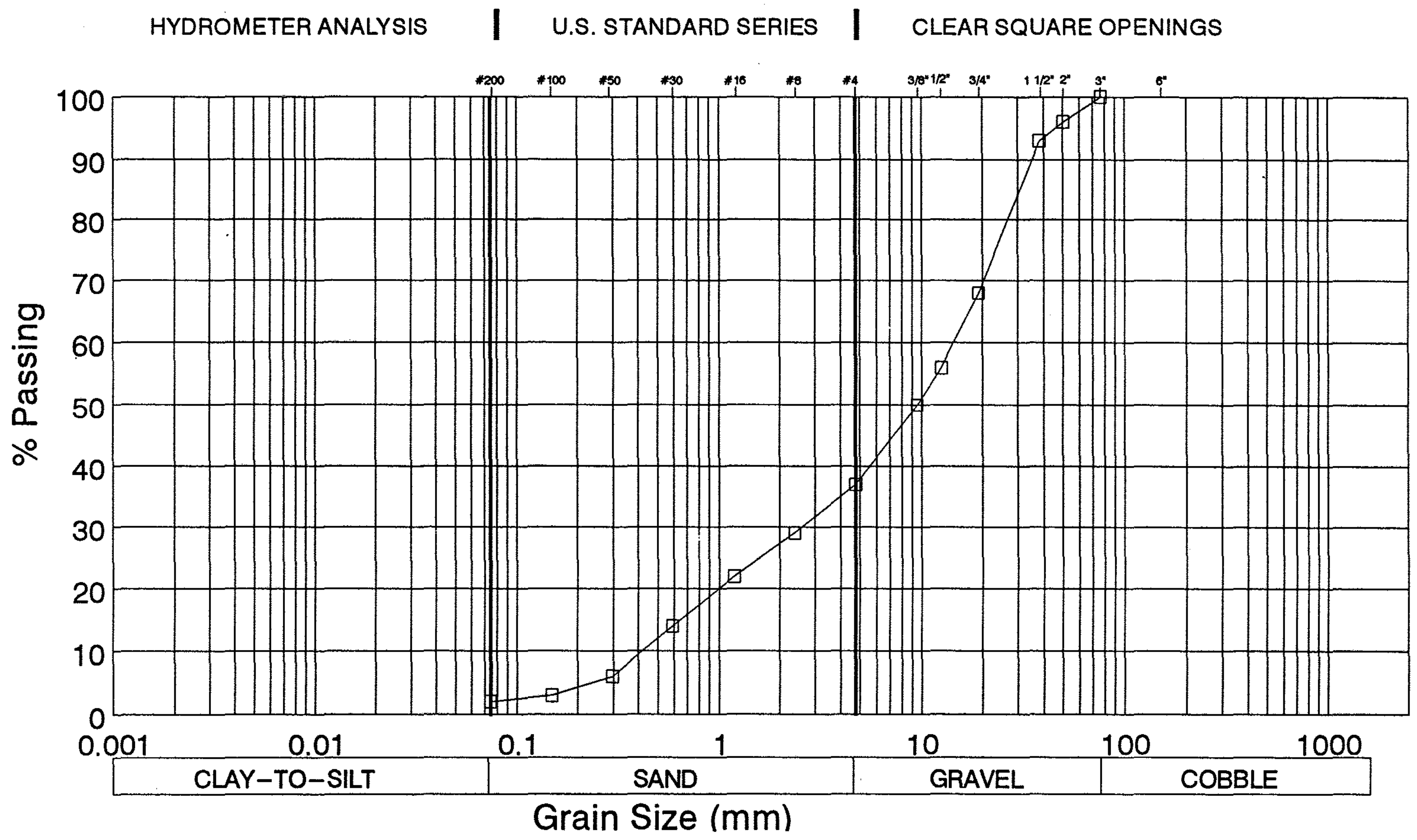
PDD:clg

| | |
|---|---|
| Report By: | Prav Dayah, Lab Director, CET 084135 |

TERRATECH, INC.

| Terratech, Inc. | GRAIN SIZE DISTRIBUTION | (408) 372-3716 |
|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Project: | Adobe Creek Sedimentation | | | Date: | 07/28/94 |
| Client: | Santa Clara Valley Water District | | | Project #: | 5499/1 |
| Sample #: | SED-9 | Depth: | 0.0' | Lab #: | 2230 |
| Material Description: | WELL GRADED SAND WITH GRAVEL; brown (GW) | | | Date Tested: | 07/27/94 |



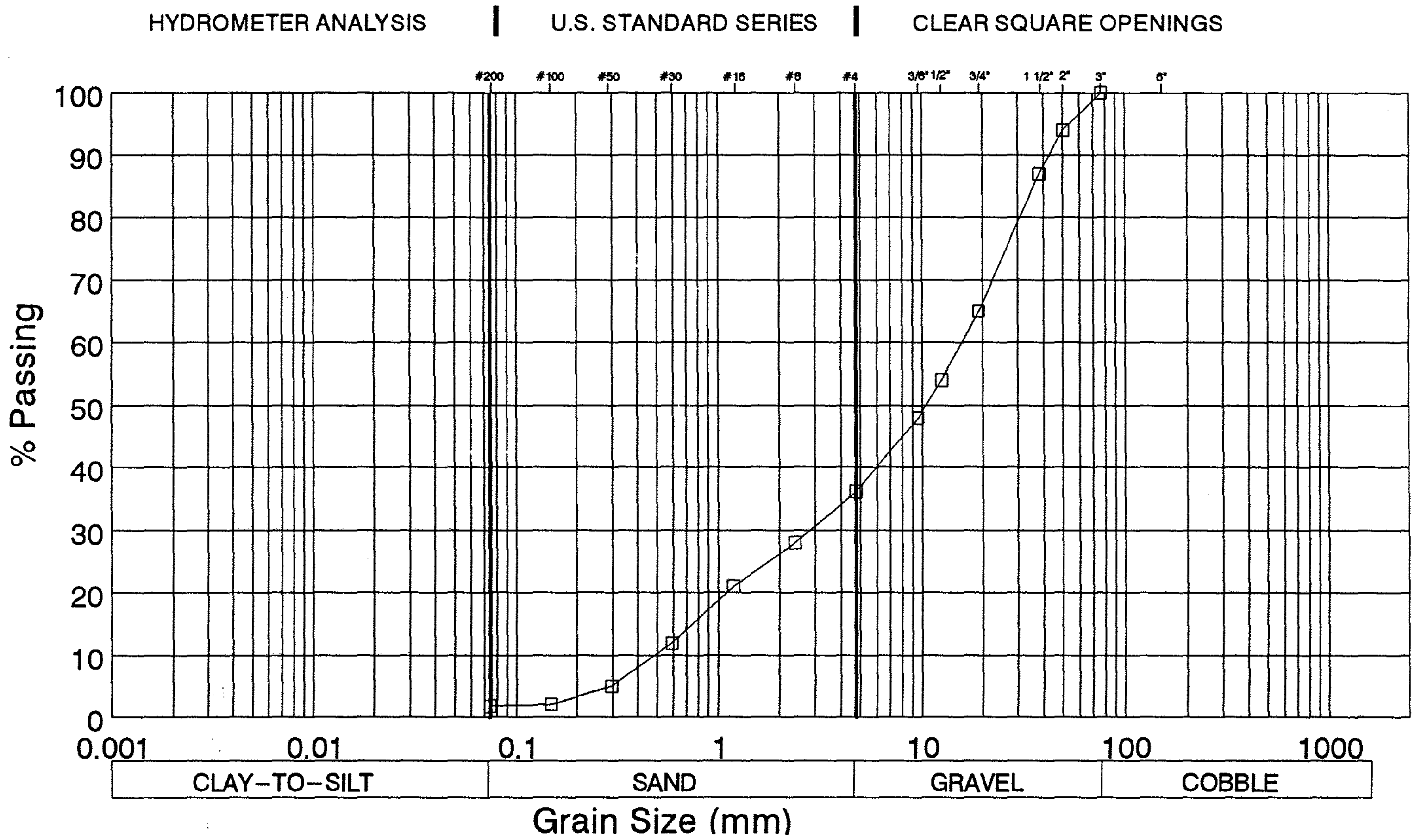
PDD:clg

| | |
|---|---|
| Report By: | Prav Dayah, Lab Director, CET 084135 |

TERRATECH, INC.

| Terratech, Inc. | GRAIN SIZE DISTRIBUTION | (408) 372-3716 |
|---|---|---|

| | | | |
|---|---|---|---|
| Project: | Adobe Creek Sedimentation | Date: | 07/28/94 |
| Client: | Santa Clara Valley Water District | Project #: | 5499/1 |
| Sample #: | SED-11 Depth: 0.0' | Lab #: | 2230 |
| Material Description: | WELL GRADED SAND WITH GRAVEL; brown (GW) | Date Tested: | 07/27/94 |



PDD:clg

| | |
|---|---|
| Report By: | Prav Dayah, Lab Director, CET 084135 |

# MOISTURE CONTENT / ORGANIC CONTENT
## ASTM D2216 or CAL 226

**Project:** ADOBE CREEK SEDIMENTATION **Proj.#:** 5499/1
**Date Tested:** 7/26/94 **Lab#:** 115255
**Tested By:** AV **Checked By:**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Sample #** | SED-1 | **Sample #** | SED-1 | **Sample #** | SED-2 | **Sample #** | SED-2 |
| **Tare #** | A | **Tare #** | A1 | **Tare #** | MT | **Tare #** | A1 |
| **Tare wt** | 223.56 | **Tare wt** | 169.33 | **Tare wt** | 224.94 | **Tare wt** | 169.33 |
| **Wet wt + tare** | 810.20 | dry **wt + tare** | 217.33 | wet **wt + tare** | 986.20 | dry **wt + tare** | 237.03 |
| **Dry wt + tare** | 500.14 | kiln **wt + tare** | 208.17 | **Dry wt + tare** | 597.83 | kiln **wt + tare** | 227.52 |
| **Wt of water** | 310.1 | **Wt of** organics | 9.16 | **Wt of water** | 388.37 | **Wt of** organics | 9.51 |
| **Dry wt.** | 276.5 | dry **wt.** | 48.0 | dry **wt.** | 372.89 | dry **wt.** | 67.7 |
| **% Moisture** | 112.11 | **%** ORGANICS | 19.1 | **% Moisture** | 104.15 | **%** ORGANICS | 14.1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Sample #** | SED-3 | **Sample #** | SED-3 | **Sample #** | NAT-3 | **Sample #** | NAT-3 |
| **Tare #** | A2 | **Tare #** | A2? | **Tare #** | A1 | **Tare #** | A1 |
| **Tare wt** | 44.05 | **Tare wt** | 44.05 | **Tare wt** | 169.33 | **Tare wt** | 169.33 |
| **Wet wt + tare** | 170.72 | dry **wt + tare** | 92.88 | **Wet wt + tare** | 512.05 | dry **wt + tare** | 445.87 |
| **Dry wt + tare** | 92.88 | kiln **wt + tare** | 82.50 | **Dry wt + tare** | 445.87 | kiln **wt + tare** | 438.90 |
| **Wt of water** | 77.84 | **Wt of** organics | 10.38 | **Wt of water** | 66.18 | **Wt of** organics | 6.97 |
| **Dry wt.** | 48.83 | dry **wt.** | 48.83 | **Dry wt.** | 276.54 | dry **wt.** | 276.54 |
| **% Moisture** | 159.41 | **%** ORGANICS | 21.3 | **% Moisture** | 23.93 | **%** ORGANICS | 2.5 |

**Material Descriptions:** (Depth, Location, Source, Classification, etc.)

| | |
|---|---|
| **Sample #** SED-1 | SILT w/ organics (grayish brown, bay mud) |
| **Sample #** SED-2 | SILT w/ organics (black, bay mud) |
| **Sample #** SED-3 | SILT w/ organics (black, bay mud) |
| **Sample #** NAT-3 | sandy SILTY CLAY (brown) |
| **Sample #** | |
| **Sample #** | |
| **Sample #** | |
| **Sample #** | |

**Remarks:**

# APPENDIX C

## Revegetation Analysis Results

**SOIL AND PLANT LABORATORY, INC.**

SANTA CLARA OFFICE
July 28, 1994
Lab. No. 72553

TERRATECH
29 JULY 1994

TERRATECH INC.
12 Thomas Owens Way
Monterey, CA 93940

Attn: Mary Bannister

RE: ADOBE CREEK SEDIMENTS
JOB #5449/71
P.O. #9259

BACKGROUND

The six soil samples received represent areas where revegetation is proposed. At the time of submittal testing per lab code A05 and cation exchange capacity determinations were requested. CEC data is provided without commentary.

SUMMARY

Test results show no particular limitations with respect to soil chemistry or anticipated soil structure. Phosphorus and/or potassium fertilization is suggested for all samples.

ANALYTICAL RESULTS

Particle size results show all samples are generally loams with some tendency toward consolidation. Samples 1R, 4R and 4L are sandy clay loams with moderately excessive coarse particle fractions that appear most susceptible to consolidation. Sample 2R is a loam with slightly high silt, suggesting moderate compactive tendencies, and low coarse particle fractions and anticipated structure appears best for this sample. Samples 1L and 3R are clay loams with slightly high clay and moderate coarse particle fractions and slight consolidative tendencies are also expected for these samples. Organic matter content is low in terms of having a significant positive affect on porosity for samples 1L, 3R, 4R and 4L, is fair for sample 1R and is excellent for sample 2R.

Reaction values generally fall in a neutral to slightly alkaline range and all are suitable for a wide variety of plants. Qualitative lime values are favorably low with the exception of 1L which shows moderate lime. Salinity and boron are safely low throughout. Soluble sodium is well-balanced by calcium and magnesium for all samples.

Fertility data show some variability though shortfalls that should be addressed involve only phosphorus and potassium. Nitrogen is adequate for 1L, 2R and 3R and is low elsewhere. Phosphorus is adequate for 3R and 4R and is low elsewhere. Potassium is low for 3R, 4R and 4L, fair for 1L and 2R and is excellent for 1R. Calcium is moderately high for 4L and is adequate elsewhere. Magnesium is adequate for 4L and is well-supplied elsewhere.

RECOMMENDATIONS

Planting details are unknown so suggestions for surface amending or backfill amending are provided below.

Where dense planting is proposed, surface amending might be practical. The following fertilizers should be evenly spread then thoroughly incorporated to a 6 inch depth:

| | AM'T/1000 SQUARE FEET | |
|---|---|---|
| For 1R, 1L, 2R 4L only | 10 pounds | Treble Superphosphate (0-48-0) |
| For 3R, 4R, 4L only | 13 pounds | Potassium Sulfate (0-0-50) |

For backfill to be placed around the sides of the rootball of trees or shrubs fertilizing per the following is suggested as an alternative:

| | AM'T/CUBIC YARD SOIL | |
|---|---|---|
| For 1R, 1L, 2R 4L only | 3/4 pound | Treble Superphosphate |
| For 3R, 4R, 4L only | 3/4 pound | Potassium Sulfate |

Consideration should be given toward placing slow-release fertilizer tablets in the backfill to help insure long-term fertility requirements will be satisfied.

Please call if further discussion is required.

GREGG KITAGAWA

gk

**Soil and Plant Laboratory, Inc.**

PO Box 6566, Orange, California 92613-6566/(714) 282-8777/FAX (714) 282-8575
PO Box 153, Santa Clara, California 95052-0153/(408) 727-0330/FAX (408) 727-5125
PO Box 1648, Bellevue, Washington 98008-1648/(206) 746-6665/FAX (206) 562-9531

TERRATECH INC
1365 Vander Way
San Jose, CA 95112
Attention: Mary Bannister

COMPLETE SOIL
EVALUATION
(A05)

Santa Clara Office
Lab No. 72553
ADORE CREEK SEDIMENTS
5499/71
P.O. No. 9259

Samples Taken: Samples Rec'd: 7/14/94

| Sample # | Half Sat%/ TEC | -Parts Per Million Parts Dry Soil- | | | | | | pH/ Qual Lime | ----Saturation Extract Values------ | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NO3 N | NH4 N | PO4 P | K | Ca | Mg | | ECe | Ca me/l | Mg me/l | Na me/l | K me/l | B ppm | Cl me/l | SAR | Sample Description & Log Number |
| 1 | 23 | 11 | 10 | 15 | 500 | 3060 | 842 | 7.2 | 0.7 | 3.6 | 2.5 | 0.5 | 0.9 | 0.25 | | 0.3 | Reveg - 1R |
| | 233 | | 0.4 | 0.6 | 1.4 | 0.9 | 1.8 | Low | | | | | | | | | 0.9494-A22331 25 4 |
| 2 | 21 | 27 | 6 | 14 | 210 | 3050 | 666 | 7.5 | 3.0 | 16.1 | 10.0 | 7.3 | 0.5 | 0.28 | | 2.0 | Reveg - 1L |
| | 207 | | 0.8 | 0.5 | 0.7 | 1.0 | 1.6 | Med | | | | | | | | | 0.9194-A22332 25 4 |
| 3 | 28 | 42 | 8 | 16 | 300 | 4160 | 830 | 7.3 | 1.1 | 6.1 | 3.6 | 1.2 | 0.6 | 0.28 | | 0.5 | Reveg - 2R |
| | 279 | | 0.9 | 0.5 | 0.7 | 0.9 | 1.4 | Low | | | | | | | | | 1.0094-A22333 25 4 |
| 4 | 19 | 32 | 10 | 24 | 180 | 3820 | 1140 | 6.9 | 1.0 | 5.2 | 3.8 | 0.7 | 0.2 | 0.14 | | 0.3 | Reveg - 3R |
| | 287 | | 1.1 | 1.0 | 0.5 | 1.1 | 2.5 | Low | | | | | | | | | 0.7494-A22335 25 4 |

| Sample # | Org % | ---Gravel-- | | Percent of Sample Passing 2 mm Screen | | | | | USDA Soil Classification | Sample Description & Log Number |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | ---------Sand----------- | | | | | | |
| | | Coarse 5-12 | Fine 2-5 | Very Coarse 1-2 | Coarse 0.5-1 | Med. to V. Fine 0.05-.5 | Silt .002-.05 | Clay 0-.002 | | |
| 1 | 4.4 | 5.4 | 10.6 | 6.8 | 8.7 | 31.1 | 25.0 | 28.4 | sandy clay loam | Reveg - 1R<br>CEC =92.4 meq |
| 2 | 2.6 | 7.6 | 7.5 | 5.8 | 8.4 | 28.4 | 23.0 | 34.4 | clay loam | Reveg - 1L<br>CEC = 23.8 meq/ |
| 3 | 7.8 | 4.8 | 3.2 | 1.8 | 3.8 | 43.0 | 33.0 | 18.4 | loam | Reveg - 2R<br>CEC = 67.4 meq/ |
| 4 | 2.0 | 7.0 | 8.7 | 5.2 | 6.4 | 25.0 | 32.0 | 31.4 | clay loam | Reveg - 3R |

7/18/94

Half Saturation %=approximate field moisture capacity. Salinity = ECe(dS/m at 25 degree C). Gravel fraction expressed as percent by weight of oven-dried sample passing a 12mm (1/2 inch) sieve. Particle sizes in millimeters. SAR = Sodium Adsorption Ratio. Sufficiency factor (1.0=sufficient for average crops) below each nutrient element. N factor based on 200 ppm constant feed.

TEC (listed below Half Sat. when requested) = Estimated Total Exchangeable Cations in milliequivalents per kilogram (meq/kg)

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## COMPLETE SOIL
## EVALUATION
## (AO5)

Santa Clara Office
Lab No. 72553
ADORE CREEK SEDIMENTS
5499/71
P.O. No. 9259

Samples Taken:

Samples Rec'd: 7/14/94

| Sample # | Half Sat%/ TEC | -Parts Per Million Parts Dry Soil- | | | | | | pH/ Qual Lime | ----Saturation Extract Values------ | | | | | | | SAR | Sample Description & Log Number |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NO3 N | NH4 N | PO4 P | K | Ca | Mg | | ECe | Ca me/l | Mg me/l | Na me/l | K me/l | B ppm | Cl me/l | | |
| | | | | | | | | | | | | | | | | | CEC = 57.6 meq/1 |

7/18/94

Half Saturation %=approximate field moisture capacity. Salinity = ECe(dS/m at 25 degree C). Gravel fraction expressed as percent by weight of oven-dried sample passing a 12mm (1/2 inch) sieve. Particle sizes in millimeters. SAR = Sodium Adsorption Ratio. Sufficiency factor (1.0=sufficient for average crops) below each nutrient element. N factor based on 200 ppm constant feed.
TEC (listed below Half Sat. when requested) = Estimated Total Exchangeable Cations in milliequivalents per kilogram (meq/kg)

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ADORE CREEK SEDIMENTS
5499/71
P.O. No. 9259

Samples Taken: Samples Rec'd: 7/14/94

| Sample # | Half Sat%/ TEC | -Parts Per Million Parts Dry Soil- NO3 N | NH4 N | PO4 P | K | Ca | Mg | pH/ Qual Lime | ----Saturation Extract Values------ ECe | Ca me/l | Mg me/l | Na me/l | K me/l | B ppm | Cl me/l | SAR | Sample Description & Log Number |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 17 | 2 | 6 | 21 | 160 | 3900 | 822 | 7.4 | 0.6 | 4.0 | 2.3 | 0.7 | 0.1 | 0.26 | | 0.4 | Reveg - 4R |
| | 266 | | 0.2 | 1.0 | 0.6 | 1.3 | 2.1 | Low | | | | | | | | | 0.7094-A22336 25 4 |
| 6 | 17 | 4 | 6 | 5 | 120 | 5600 | 327 | 7.3 | 0.6 | 4.8 | 1.0 | 0.3 | 0.1 | 0.12 | | 0.2 | Reveg - 4L |
| | 309 | | 0.3 | 0.3 | 0.4 | 1.7 | 0.7 | Low | | | | | | | | | 0.6794-A22337 25 4 |

| Sample # | Org % | ---Gravel-- Coarse 5-12 | Fine 2-5 | Percent of Sample Passing 2 mm Screen ---------Sand---------- Very Coarse 1-2 | Coarse 0.5-1 | Med. to V. Fine 0.05-.5 | Silt .002-.05 | Clay 0-.002 | USDA Soil Classification | Sample Description & Log Number |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 1.1 | 7.7 | 18.7 | 11.0 | 11.2 | 25.4 | 24.0 | 28.4 | sandy clay loam | Reveg - 4R<br>CEC = 45.7 meq/1 |
| 6 | 1.4 | 9.7 | 22.2 | 17.8 | 17.2 | 20.6 | 21.0 | 23.4 | sandy clay loam | Reveg - 4L<br>CEC = 56.5 meq/1 |

7/18/94

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Half Saturation %=approximate field moisture capacity. Salinity = ECe(dS/m at 25 degree C). Gravel fraction expressed as percent by weight of oven-dried sample passing a 12mm (1/2 inch) sieve. Particle sizes in millimeters. SAR = Sodium Adsorption Ratio. Sufficiency factor (1.0=sufficient for average crops) below each nutrient element. N factor based on 200 ppm constant feed.
TEC (listed below Half Sat. when requested) = Estimated Total Exchangeable Cations in milliequivalents per kilogram (meq/kg)